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MILITARY-POLITICAL ISSUES

SOVIET VIEW ON U. S. NAVY IN INDIAN OCEAN

Moscow VOYENNNYYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) pp 43-44

[Article by I. Bulay, candidate of historical sciences: "U.S. Basing Strategy in the Indian Ocean--A Threat to Peace"]

[Text] In the postwar years the ruling circles of the United States made a sharp turn toward increasing tension, confrontation, and the arms race in its international policy. The reasons for this turn were disclosed comprehensively by the 26th CPSU Congress at which it was noted that the discussion concerns the reaction of capitalism to the economic, social, and foreign-policy difficulties which it is experiencing. In trying to achieve the accomplishment of their narrowly mercenary goals, the most aggressive imperialist circles are conducting an adventurist policy and are ready to stake all of mankind's vital interests. They would like to erect a barrier in the path of progressive changes in the world and have set their course toward undermining the military-strategic balance between the world of socialism and capitalism in order to dictate their conditions from a position of strength and to interfere in the affairs of other states and peoples with impunity. "The imperialist circles think in categories of domination and compulsion in relation to other states and peoples," stressed the General Secretary of the CPSU Central Committee and Chairman of the Presidium of the USSR Supreme Soviet, Comrade L. I. Brezhnev, from the rostrum of the 26th CPSU Congress. "The monopolies need foreign oil, uranium, and nonferrous metals--and the United States has declared the Near East, Africa, and the Indian Ocean to be a sphere of its 'vital interests.' The military machine of the United States is actively penetrating there and intends to stay there for a long time."

Here for several years already the United States has been increasing its aggressive activity in the vast region from Southwest to Southeast Asia, especially in the region of the Indian Ocean--one of the most densely populated on Earth; about one third of all of mankind resides there.

The waters of the Indian Ocean wash the shores of 36 states of three continents--Asia, Africa, and Australia. Altogether, this region counts more than 40 littoral, insular, and continental states. (In accordance with UN terminology, the littoral states of the Indian Ocean are those which have a direct exit to its waters or to the water areas of the Caspian Sea and the Persian Gulf, and continental states are those which do not have a direct exit to the ocean but are separated from it by the territory of no more than one littoral state.)

This region is the richest larder of natural resources. Approximately 50 billion tons of oil -- about 60 percent of all reserves which have been explored in the non-socialist part of the world -- are concentrated in the basin of the Persian Gulf alone. There are large reserves of uranium, tin, gold, and diamonds in the countries of the Indian Ocean. They are the main producers of natural rubber, jute, wool, tea, and spices. Tremendous riches -- living and mineral -- are hidden in the waters of the ocean.

It is difficult to overestimate the significance of its water area as a transportation and communications center. The most important sea and air lines are concentrated there. The network of water routes in the Indian Ocean is denser than anywhere else in the World Ocean. Tankers with oil virtually follow in each other's wake as they move out of the Persian Gulf.

In building up their military efforts in the Indian Ocean, the ruling circles of the United States at the same time are trying to justify their aggressive course by fanning the myth of a "Soviet threat." Washington is still trying to present the increase in the military might of the United States in this region as a reaction to the introduction of a limited Soviet military contingent into Afghanistan. However, it cannot be concealed that the policy of the United States in the Indian Ocean, in particular that part of it which adjoins the countries of the Near and Middle East, in essence was formulated long ago when the United States had begun actively to appropriate the region's oil resources. With the years, it expanded the scales of its penetration into the economy of these countries, squeezing out competitors. Cheap oil not only enriched American monopolies, but it also fed the armed forces of the United States which were located in Western Europe and East and Southeast Asia.

Even earlier Washington many times declared its imperialist claims and stressed the aspiration to establish its control over the raw material resources of other countries. In 1946 President H. Truman spoke of "the tremendous economic and strategic significance" of the region of the Near and Middle East for the United States. The deployment of American naval forces in the Indian Ocean was begun two years later. A force of three combat ships which were based at Bahrein began to represent the U. S. Navy in the Persian Gulf on a permanent basis. Aircraft carriers from the U. S. Seventh Pacific Fleet periodically made calls in the Indian Ocean where they worked out "wartime plans" for the "protection of communications." At that time the American warships served as a symbol of the U. S. "presence." And when the threat to the positions of American capital arose in Iran in the 1950's, Mossadegh's progressive regime was overthrown and in 1953, despite the will of the Iranian people, the Shah was installed on the throne. In 1958, they executed the military intervention in Lebanon. Washington's course for the suppression of liberation movements in those years found manifestation in the creation of regional aggressive military blocs: CENTO in Southwest and SEATO in Southeast Asia. Relying on the ANZUS military pact (United States, Australia, and New Zealand), the Pentagon provided itself with military bases in the southeastern part of the Indian Ocean.

A sudden intensification of the United States' attention to processes occurring in the zone of the Indian Ocean occurred in the 1970's. In the opinion of American strategists, the so-called "power vacuum" which, according to the notion of Washington, had been formed in connection with the departure of British troops from the regions "East of Suez," had to be filled. In the United States it was not considered

possible to leave the developing countries of the region without looking after on the part of the West. The "increased" attention of the United States' ruling circles to this region of the world was caused by the fact that they considered and continue to consider national-liberation and revolutionary movements in the region's developing countries as a threat to the interests of American monopolies. For the countries of the Indian Ocean are big suppliers of many types of strategic raw materials for the United States--oil and nonferrous metals. An indicator of the level of economic expansion of the United States in the countries of the Indian Ocean basin can be provided by the volume of American capital investments which exceeds 10 billion dollars there.

The U.S. military presence in one region or another is traditionally considered in Washington as a guarantee of the interests of American monopolies. Back in 1964, when the Pentagon unleashed the aggressive war in Vietnam, the sphere of action of the U. S. 7th Pacific Fleet was extended to the Indian Ocean, propping up Indochina in the South. In 1971 a U.S. Naval striking force led by the aircraft carrier "Enterprise" was sent to the shores of India. Beginning with 1972, the United States began regularly to dispatch big naval task forces to the Indian Ocean for a period of up to two months, and subsequently, for a longer period. At the same time, the Pentagon began to work out plans for the creation of the independent 5th Fleet for the Indian Ocean. Since then, the U. S. Navy has been constantly present in this region, which places first one and then another country's security under threat.

Thus, at the beginning of 1980, when the American-Iranian crisis was in full swing, the carriers "Nimitz," "Coral Sea," "Kitty Hawk," "Midway," and "Constellation" cruised in the Indian Ocean, replacing one another. In March 1980, a U. S. Marine task force headed by the helicopter carrier "Okinawa" appeared in the Arabian Sea. The total displacement of the American ships which were cruising in the Indian Ocean in the first half of 1980 was about 440,000 tons. They had on board 325 airplanes, 38 helicopters, about 28,000 personnel, 1,800 Marines on the "Okinawa," and 1,000 amphibious landing force members on other ships.

In addition to intentions to "bridle" the process of the national liberation movement in the countries of the Indian Ocean basin, the United States is striving to build up its own strategic potential there, looking on this region as a beachhead for the placement of strategic weapons aimed at the Soviet Union. Washington's course toward undermining the balance which exists in the field of strategic armaments between the USSR and the United States and imperialism's intentions to change the correlation of forces in the world arena in its favor is not in the least caused by the striving to untie its hands for interference with impunity in the affairs of young liberated states. This course was formulated as doctrine in the years of government by the administration of J. Carter and received new impetus of aggressiveness with the present administration of R. Reagan.

In August 1977, in Presidential Directive No 18, J. Carter issued the order for the creation of "mobile forces capable of reacting quickly to local wars." Thus was begun the formation of one of the tools of Washington's aggressive policy--a gendarme corps in the form of the "Rapid Deployment Force." Its composition was initially set at 110,000 men, and then at 200,000. In June 1980, as the newspaper NEW YORK TIMES wrote, U. S. Marine Corps General P. Kelly declared that the number of troops from which he already could form the striking task force had increased to 300,000

men. A "limited strategic variant" was also worked out in accordance with which the possibility was envisioned for the employment of American nuclear weapons in the area of the Persian Gulf. The present U. S. Secretary of Defense, C. Weinberger, even declared that the Pentagon "will use neutron weapons everywhere in the world," stressing that they may be put into action by the "Rapid Deployment Force."

B-52 bombers from a division of the Strategic Air Command located in Minot, North Dakota, were specially allocated with their sights on the countries of the Indian Ocean. To ensure their landings in transit, Washington obtained the right to use the airfield in Darwin--in northern Australia. Since the spring of 1981, a specially launched American reconnaissance satellite has been observing the region of the Indian Ocean.

The Reagan administration has unleashed an arms race unprecedented in scale. Here special attention is devoted to building up the Navy. It is planned to increase the number of warships from 456 to 600. The U. S. military leadership is striving for the creation of 15 carrier striking forces. The battleship "New Jersey," which it is planned to put into operation at the beginning of 1983, is being de-mothballed in Long Beach, California, and armed with the latest missile systems.

The present U. S. leadership has announced the development of a "new naval strategy," but it sooner recalls the doctrine of U. S. world domination which was formulated back at the end of the last century when the passionate adherent and theoretician of American expansion, Admiral Mahan, put forth the conception of "control of the sea." He wrote that such control "signifies predominant influence in the world." The present Secretary of the Navy, J. Lehman, repeated Mahan almost verbatim. Speaking at the National Press Club, he spoke of American intentions to attain "indisputable sea superiority" in order to "guarantee access to vitally important regions of the world," among which the Persian Gulf region is placed in one of the first places.

The United States has set its course for the creation and expansion of a network of military bases in the Indian Ocean. The base on the island of Diego Garcia has been transformed into the most important regional strategic strong point. Formerly, it belonged to Mauritius. But, in 1965, when granting Mauritius independence, Great Britain tore it away from its former colony and, in 1966, transferred it to the United States for a period of 50 years. Now powerful port structures, an airfield, and a large warehouse complex have been created on Diego Garcia and a military cantonment has been constructed. According to data in the American press, the number of U. S. military personnel servicing this base has reached 5,000 men. Eight huge storage tanks have been installed on the island to store a three-month's supply of fuel for the U. S. warships and airplanes which are operating in the zone of the Indian Ocean.

Based at Diego Garcia is the tender "Dixie" for American destroyers, the submarine tender "Spear," and seven transport vessels--floating depots with a cargo of tanks, armored personnel carriers, military equipment, ammunition, and food. As reported by the Reunion newspaper TEMOIGNAGE, the United States is creating a big nuclear weapons depot on Diego Garcia.

In the Pentagon, the role of central connecting link in the network of military and strong points of the United States in this vast region has been allotted to the base on Diego Garcia. The United States is obviously trying to create a "ring of bases" in the Indian Ocean and to secure for itself military structures in countries of the Near and Middle East, Africa, and Southeast Asia.

An ever-increasing role is being allotted to Pakistan in the United States's aggressive plans in the area of the Indian Ocean. In Washington's plans, it is being considered as a replacement for the Shah's regime in Iran. In the recent past, Pakistan was a member of the now disintegrated CENTO and SEATO blocs. Now this country is again being dragged into a strategy which is foreign to its interests. In the summer of 1981, an agreement was reached between the United States and Pakistan in accordance with which Islamabad would be granted American military and economic assistance for five years to the sum of more than three billion dollars.

Such generosity on the part of Washington was caused by the far-reaching plans of imperialist and hegemonistic forces. This country is being actively used by the United States and China as a beachhead for the conduct of an undeclared war against Afghanistan. Meanwhile, the United States is trying to transform Pakistan into a connecting link in the alliance between American imperialism and Chinese hegemonism which is being formed. As reported by the Indian information agency "Press Asia International," in November 1980 China and Pakistan concluded an agreement for the construction of a naval base west of the port of Karachi. Here, Beijing is actively using the Karakorum Road which passes from the Chinese province of Xinjiang through Indian territory occupied by Pakistan--Jammu and Kashmir--and ending north of Islamabad. This road, which was put into operation in 1978, opened for China a route deep into the South Asian subcontinent and an exit to the Indian Ocean.

The aggressive aspirations of the United States and China are causing growing concern in the countries of the Indian Ocean basin. Prominent public and political figures of many countries of the region have come forth many times with condemnation of Washington's militaristic policy. Their alarm is justified. "Washington's numerous military adventures have proven," wrote the newspaper NATIONAL HERALD which is close to government circles, "that it is ready without wavering to launch a strike against any state of the Indian Ocean to 'protect American interests.'" India's concern is also shared by other countries of the area. For Washington is trying to cancel all decisions of the United Nations, in particular the Declaration which proclaimed the Indian Ocean a peace zone 10 years ago.

In the opinion of the Soviet Union, the Indian Ocean was and remains the sphere of vital interests of the countries located in this region and of none other. The USSR is convinced of the necessity for joint actions by the states of the Indian Ocean to rally all forces which are interested in the transformation of this region into a zone of firm peace and good-neighborly collaboration.

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ARMED FORCES

CHANGES IN REVISED UNIVERSAL MILITARY LAW DISCUSSED

Vilnius SOVETSKAYA LITVA in Russian 20 Mar 82 p 2

[Article by Maj Gen Arty V. Mitskevichus, military commissar of Lithuanian SSR: "On Certain Changes in the USSR Law 'On Universal Military Obligation'"; text of the Revised Law was published in JPRS 78407, 29 June 81 USSR REPORT: MILITARY AFFAIRS No 1600]

[Text] On 17 December 1980 the Presidium of the USSR Supreme Soviet published the Ukase "On Making Changes and Additions to the USSR Law 'On Universal Military Obligation'" for bringing it into conformity with the USSR Constitution and for further improvement in legislation on national defense. A number of new provisions have been included in the law regulating obligations of Soviet citizens for fulfilling their honorable military duty, and there is a more complete definition of the obligations of state entities, public organizations and appointed persons for assuring national security and strengthening its defenses. All changes and additions became effective as of 1 January 1982.

The changes adopted devote much attention to an improvement in preparation of the youth for military service. For example, Article 18 of the Law, which mentions preparation of military-technical specialists, now emphasizes: "Preparation of specialists for the USSR Armed Forces in cities is done without separation from production. For the period of training an abbreviated work day is established for young trainees as applicable to the rules prescribed by existing legislation for workers and employees training in schools of working youth, and they are given 7-15 work days (depending on specialty and scope of curricula) for the period of training and exams with retention of average wages at the primary work location."

Attendance at classes by draftees brought in for training in military specialties by military commissariats is compulsory.

A change in the draft sector at the draftee's wish is permitted only from 1 January to 1 April and from 1 July to 1 October.

A change has been made to Article 34 of the Law granting a deferment from call-up for active military service for family reasons. The 1967 USSR Law "On Universal Military Obligation" stated that if a person eligible for the draft was a dependent of other persons for at least 10 years in connection with the death of parents, their prolonged illness or for other valid reasons, in this case they were equated to parents and the person eligible for the

draft was granted a deferment under conditions prescribed by law. This time period now has been cut to five years.

Substantial changes have been made to Article 35 of the Law on granting a deferment from call-up for continuing education. From now on a deferment is granted only to students of daytime (on-campus) higher educational institutions included in the list of higher educational institutions approved by the USSR Council of Ministers. For our republic this list includes only the Lithuanian Agricultural Academy and the Kaunas State Medical Institute. Students of these higher educational institutions are granted a deferment from call-up on the condition that they continue studying there beginning with the first course. Persons expelled from the higher educational institution for poor progress, lack of desire to study or lack of discipline lose the right for another deferment for a continuation of education.

Students accepted in higher educational institutions up to 1 January 1982 are granted the right to deferment under conditions established by the 1967 Law.

The Law in the new wording envisages a number of benefits for citizens who have served the prescribed time in the Soviet Army. Persons released from active military service now will have advantages for entry into higher and secondary specialized educational institutions or the right to be enrolled for continued study in that educational institution and in the course in which they were studying before call-up. After release, servicemen sent to higher and secondary specialized educational institutions on recommendations of the command element of military units will be enrolled in these educational institutions hors concours on condition that they obtain positive grades in entrance exams. The list of specialties for which servicemen released to the reserve are enrolled hors concours is approved by the Ministry of Higher and Secondary Specialized Education (the list is being drawn up).

Servicemen released from active military service and accepted at their previous work location will have the right to obtain material assistance for initial acquisitions.

The changes and additions made to the USSR Law "On Universal Military Obligation" attest to a new manifestation of concern by the Communist Party and Soviet government for the USSR Armed Forces, a further strengthening of defenses of the Soviet state, and an increase in its might and authority.

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CSO: 1801/162

ARMED FORCES

STATUTE ON DISCIPLINARY RESPONSIBILITY OF TRIBUNAL JUDGES

Moscow VEDOMOSTI VERKHOVNOGO SOVETA SOYUZA SOVETSKIKH SOTSIALISTICHESKIKH RESPUBLIK in Russian No 7 (2133), 17 Feb 82 pp 84-88

[USSR Supreme Soviet Presidium Ukase, Article 106, "On Disciplinary Responsibility of USSR Court Judges"; passages enclosed in slantlines printed in boldface]

[Text] In conformity with Article 37 of the "Foundations of Legislation of the USSR and Union Republics on the Judicial System in the USSR," the USSR Supreme Soviet Presidium /decrees:/

1. To establish that the question of responsibility of USSR Supreme Court judges for disciplinary infractions is decided by the USSR Supreme Soviet Presidium.
2. Judges of military tribunals bear disciplinary responsibility under the procedure established by the "Statute on Disciplinary Responsibility of Military Tribunal Judges."

To approve the "Statute on Disciplinary Responsibility of Military Tribunal Judges" and place it in effect on 1 March 1982.

3. To invalidate the USSR Supreme Soviet Presidium Ukase dated 15 July 1948 "On Disciplinary Responsibility of Judges" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, No 31, 1948).

/Chairman of USSR Supreme Soviet Presidium L. Brezhnev.

Secretary of USSR Supreme Soviet Presidium M. Georgadze./

Moscow, the Kremlin, 8 February 1982

No 6518-X.

Approved by USSR Supreme Soviet Presidium Ukase dated 8 February 1982, No 6518-X

/Statute on Disciplinary Responsibility of Military Tribunal Judges/

/Article 1./ Military tribunal judges bear disciplinary responsibility under the procedure specified by this Statute. Requirements of Chapter 3 of the USSR Armed Forces Code of Disciplinary Punishment do not extend to them.

/Article 2./ Military tribunal judges may be held answerable for disciplinary responsibility:

1. For an infraction of military discipline and commission of misdemeanors unworthy of a Soviet judge;
2. For carelessness or lack of discipline which leads to omissions in judicial work, and for other official misdemeanors.

/Article 3./ The right of instituting disciplinary proceedings rests with:

1. Chairman of the USSR Supreme Court, USSR Minister of Justice, Chairman of the USSR Supreme Court Collegium for Military Cases, and Chief of the USSR Ministry of Justice Administration for Military Tribunals, with respect to all military tribunal judges;
2. Chairmen of military tribunals of branches of the USSR Armed Forces, districts, groups of forces and fleets, with respect to members of corresponding military tribunals as well as the judges of military tribunals of armies, flotillas, combined units and garrisons.

The Chairman of the USSR Supreme Court and Chairman of the USSR Supreme Court Collegium for Military Cases can institute disciplinary proceedings with respect to military tribunal judges for negligence or lack of discipline which causes omissions in judicial work.

The USSR Minister of Justice, Chief of the Administration for Military Tribunals of the USSR Ministry of Justice, chairmen of military tribunals of branches of the USSR Armed Forces, districts, groups of forces and fleets can institute disciplinary proceedings on grounds indicated in Article 2 of this Statute.

/Article 4./ A Collegium for Disciplinary Action is formed under the USSR Supreme Court and collegiums for disciplinary action are formed under military tribunals of branches of the USSR Armed Forces, districts, groups of forces and fleets for examining cases of breaches of discipline committed by military tribunal judges.

/Article 5./ The Chairman of the USSR Supreme Court forms a collegium for disciplinary action consisting of a chairman and two members from among judges of the USSR Supreme Court Collegium for Military Cases for examining a disciplinary case which has been received.

/Article 6./ The chairman of a military tribunal of a branch of the USSR Armed Forces, a district, group of forces or fleet forms a collegium for disciplinary action consisting of a chairman and two members from among judges of the corresponding military tribunal and inferior military tribunals for examining a disciplinary case which has been received.

/Article 7./ The collegium for disciplinary action is formed within a five-day period from the day a case is received. A decree is adopted on formation of the collegium for disciplinary action.

/Article 8./ The Collegium for Disciplinary Action under the USSR Supreme Court examines cases of breaches of discipline by chairmen and deputy chairmen of military tribunals of branches of the USSR Armed Forces, districts, groups of forces and fleets.

/Article 9./ The collegium for disciplinary action under a military tribunal of a branch of the USSR Armed Forces, district, group of forces or fleet examines cases of breaches of discipline by members of the corresponding military tribunal as well as by judges of inferior military tribunals.

/Article 10./ A military tribunal judge can be held answerable for disciplinary responsibility no later than one month from the day the infraction was discovered and no later than six months from the day it was committed.

/Article 11./ A person who institutes disciplinary proceedings checks the grounds for holding a judge answerable, demands and obtains a written explanation from him, and assembles necessary materials, after which he submits this matter for examination by the collegium for disciplinary action.

/Article 12./ The chairman of the collegium for disciplinary action or, on his behalf, one of the members of this collegium, studies the case received. If it is necessary for an additional check of the grounds for holding a judge answerable for disciplinary responsibility, the chairman of the collegium for disciplinary action performs the additional check himself or assigns it to be performed by one of the collegium members.

/Article 13./ A disciplinary matter is examined with the mandatory summons of the judge being held answerable for disciplinary responsibility. The person who instituted the disciplinary proceedings or his representative may take part in the session of the collegium for disciplinary action. Military tribunal judges may be present at the session of the collegium for disciplinary action.

/Article 14./ A judge held answerable for disciplinary responsibility may challenge members of the collegium for disciplinary action.

The issue of the challenge is decided by the remaining members of the collegium for disciplinary action. If votes are divided the member of the collegium for disciplinary action is considered to have been challenged. If a challenge is made of two or all members of the collegium for disciplinary action, the question of the challenge is decided by its entire membership.

The Chairman of the USSR Supreme Court or chairman of a corresponding military tribunal replaces the challenged member of the collegium for disciplinary action by another judge under the procedure stipulated by articles 5, 6 and 7 of this Statute.

/Article 15./ Examination of a case in the collegium for disciplinary action begins with a report by one of the members of this collegium. The person who instituted the proceedings or his representative has the right to make an announcement about the breach of discipline committed by the judge. Then explanations are heard from the judge being held answerable for disciplinary responsibility.

At the discretion of the collegium for disciplinary action, other persons may be heard and the contents both of documents present in the case as well as documents submitted additionally may be made public. After this the collegium for disciplinary action retires to confer on a decision.

Minutes are kept in the session of the collegium for disciplinary action.

/Article 16./ The collegium for disciplinary action may impose one of the following disciplinary punishments:

1. Admonition;
2. Reprimand;
3. Severe reprimand.

The nature of the infraction committed, the judge's personality and the degree of his guilt are considered in imposing punishment.

After having deemed it inadvisable to impose disciplinary punishment for the infraction committed, the collegium for disciplinary action has the right to limit itself to an examination of the case in a session.

The collegium for disciplinary action dismisses the disciplinary case if in its examination it becomes convinced of the blamelessness of the judge in commission of the infraction.

/Article 17./ If the collegium for disciplinary action considers that the infraction committed by the judge makes it impossible for him to remain in his position further, it makes this known to the person who instituted the disciplinary proceedings for raising the question of the ahead-of-schedule recall of the judge under procedures established by law.

If there are indications of a crime in the judge's actions the collegium for disciplinary action raises the question of instituting criminal proceedings against the judge under procedures established by law with simultaneous notification of the person who instituted the disciplinary proceedings concerning this fact.

/Article 18./ The decision of the collegium for disciplinary action is made by a majority vote, set forth in writing and signed by the chairman and its members.

If there is disagreement with the decision made on the disciplinary case, a member of the collegium for disciplinary action has the right to append his special opinion to the case.

/Article 19./ The decision by the collegium for disciplinary action is announced by the chairman of this collegium.

The decision must contain: the designation of the collegium for disciplinary action, its membership, and the place and time the disciplinary case was examined; last name, first name, patronymic, position and other information on the person being held answerable for disciplinary responsibility; the position and last name of the person who instituted proceedings; an account of the circumstances established in examination of the case on which conclusions of the collegium for disciplinary action are based; explanations of the person being held answerable; and the measure of disciplinary punishment or causes for dismissing the case.

/Article 20./ The decision of a collegium for disciplinary action under a military tribunal of a branch of the USSR Armed Forces, district, group of forces or fleet, based on a complaint by the judge held answerable for disciplinary responsibility as well as a representation by the person who instituted proceedings, the Chairman of the USSR Supreme Court, the USSR Minister of Justice, Chairman of the USSR Supreme Court Collegium for Military Cases, or Chief of the Military Tribunal Administration of the USSR Ministry of Justice, may be reconsidered by the collegium for disciplinary action under the USSR Supreme Court.

A complaint against a decision by a collegium for disciplinary action under a military tribunal can be submitted within a period of two weeks from the day the decision was made.

The judge held answerable for disciplinary responsibility may be summoned to a session of the Collegium for Disciplinary Action under the USSR Supreme Court examining the disciplinary case under a complaint or representation.

The complaint and representation on a disciplinary case are examined by the collegium for disciplinary action of the USSR Supreme Court within a period of two weeks from the day the complaint or representation was received.

The decision of the Collegium for Disciplinary Action of the USSR Supreme Court on a disciplinary case as well as on a complaint or representation is final.

/Article 21./ In examining a complaint or representation on a disciplinary case, the collegium for disciplinary action of the USSR Supreme Court makes one of the following decisions:

1. Leaves the decision unchanged and the complaint or representation unsatisfied;

2. Reverses the decision and submits the case for a new examination with a different membership of the collegium for disciplinary action, or accepts the case for its own examination;

3. Reverses the decision and dismisses the case;

4. Changes the decision without, however, increasing the punishment.

/Article 22./ A copy of the decision imposing disciplinary punishment or a decision made on a complaint or representation is sent within a three-day period to the judge with respect to whom they were made, to the person who instituted disciplinary proceedings, and to the Chief of the Military Tribunal Administration of the USSR Ministry of Justice. A copy of the decision is made a part of the judge's personal file.

/Article 23./ If the judge has not been subjected to a new punishment within one year from the day disciplinary punishment was imposed, he is considered not to have been given disciplinary punishment.

A disciplinary punishment can be removed ahead of schedule at the expiration of six months from the day of its imposition with faultless behavior and conscientious attitude of the judge toward execution of his duties based on a representation of the person who instituted disciplinary proceedings as well as of the Chairman of the USSR Supreme Court, USSR Minister of Justice, Chairman of the Collegium for Military Cases of the USSR Supreme Court, or Chief of the Military Tribunal Administration of the USSR Ministry of Justice. Such a decision is made by the collegium for disciplinary action formed under the procedure prescribed by articles 5, 6 and 7 of this Statute.

Secretary of USSR Supreme Soviet Presidium M. Georgadze.

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ARMED FORCES

'ZAPAD 81' MILITARY TRAINING EXERCISE

Moscow SOVETSKIY VOIN in Russian No 22, Nov 81 (signed to press 28 Oct 81) pp 2-3, 21-28

[Article by Colonel V. Pishchulin, Colonel Yu. Protasov and Captain 3d Rank V. Afinogenov: "On the Ground, In the Air and At Sea"]

[Text] Out over the expanses of the gray Baltic and the harvest fields of Belorussia the days from 4 to 12 September this year heard no letup in the roar of the guns. Artillerymen, tankers, motor riflemen, pontoneers, missilemen, aviators, seamen, paratroopers--in a word, troops of all the various services and branches of the armed forces were executing their exercise missions. This was at the same time a test of the combat readiness of the units (chast') and subunits (podrazdeleniye) involved, a test of courage and skills, a check of the results produced by the training and socialist competition held during the year of our party's 26th Congress.

"Personnel...demonstrated high political maturity and fighting qualities and a readiness to provide a reliable defense of our socialist fatherland and of our friends and allies"--this was the evaluation of Marshal of the Soviet Union D. F. Ustinov, member of the CPSU Central Committee Politburo and USSR Minister of Defense, speaking at a field review of forces participating in the ZAPAD-81 exercise.

We here offer for your attention the reports of the magazine's special correspondents Colonel V. Pishchulin, Colonel Yu. Protasov and Captain 3d Rank V. Afinogenov. Photos by Captain 2d Rank L. Yakutin, Major V. Gribov and I. Kurashov.

Unstoppability of Tank Attacks

For the last time before the "battle," tank company commander Captain Denezhkin went over the situation with his tankers. A field opened out from the hill, the same field upon which tomorrow they would have to advance to a duel with the "enemy." Frankly, the terrain here is entirely unsuitable for a tank attack. It looks like hills from over the entire area have come down here to breed and then stayed here forever. The grass on them has been burned off; the side of one of them has grown bald, the top of another; charred trees lie scattered over the slopes amidst yellow heaps of sand.

Over closer to the forest, right where the tankers have taken cover, in the undergrowth of bushes and reeds, under the sifting cushion of green moss, lies an impassable marsh. The water shivers jellylike, giving rise to chilly aversion. In a word, it's an awful place, good for absolutely nothing: one step to the side and the abyss opens up.

"The marshes are nothing for us to be afraid of," Captain Denezhkin said, as if sharing his thoughts out loud with his men. "The corduroy roads are reliable; they'll hold. But you drivers, I ask you to remember: don't shift gears and don't make any stops. Put it in second, for example, and then leave it there. You remember the film about the Great Patriotic War?... And you remember Operation Bagration? The Germans weren't expecting it, and we broke through the marshes.... Both the tanks and the artillery went through. When you're on your own native soil, they say, even the walls help."

Over in the direction of the forest, where the "southern" strike forces were concealed, artillery pieces, tanks, helicopters hidden by the hills and in their emplacements, low clouds appeared and then it soon started to rain. Returning to their camp, the tankers looked at the sky with alarm: if it rains steadily and heavily they won't be able to do anything; the corduroy roads will sink, and if it rains another hour they'll have to stay on solid ground.

The big, heavy drops, rustling the leaves as they splatter down through the trees, are of little concern just now to Captain Denezhkin. He's thinking about something else. About the "battle" tomorrow. Everything that was supposed to have been done has already been done: the platoons had been trained and drilled, the tanks prepared, the sights adjusted and talk in party and Komsomol meetings now runs to one thing alone--the need to perform as if actually in a front-line situation and to accomplish the mission in an "outstanding" manner. Everybody was now in a fighting spirit. But to him, the commander, it seemed that he had left something undone, that suddenly he had neglected something, he had wanted to, but in his haste had not checked something.

Practical experience has suggested that everything is important in combat, everything has to be taken into account ahead of time, everything provided for, thought over carefully, weighed thoroughly--only then are you right to count on victory. There is nothing worse than excessive self-confidence, than boastfulness of the kind which has one say: "Behind armor like this the devil himself is nothing to be afraid of. Let's break through."

More than once he had heard from front-line veterans as well as from his own commanders that this is in fact far from being the case. An intelligent machine needs intelligent hands. It was for this reason that he repeated to his men: "Not even the strongest armor will protect the incompetent soldier. One mistake and you destroy yourself, your tank and your comrades--the enemy knows tactics, too...."

Within the Guards Rogachevskiy Motorized Rifle Division imeni Supreme Soviet of the Belorussian SSR, Nikolay Nikolayevich Denezhkin, the son of a front-line veteran's family, had established a reputation for being a highly competent officer all around: in his tank, with all its electronic apparatus, he's fully competent, on top of everything, a splendid tactician in combat training and a sniper in firing.

Before the "battle" we talked with Captain Denezhkin in the clearing where his company's tanks were parked.

"Wonderful machines, intelligent things," he said of his tanks, not without some pride. "Sometimes it seems like you're not rolling, but flying over the ground."

He spoke with no less pride about his men. They have secondary or secondary-technical educations, most of them are rated specialists, winners of "outstanding" ratings in combat and political training, badge holders in the military sports program--in a word, true Guardsmen.

Captain Denezhkin was now waiting for the answer to only one question: how would these men perform tomorrow, when they would have to break through the "southern" defenses with the full power of their fire and armor? We asked him about that, too.

"I have confidence in them. They can handle their mission, but...." And then he smiled.

We could clearly see that a lot was hidden behind that "but", for in combat, even in combat training, the fact is that not everything goes as planned.

And then it began. It was morning.

The artillery erupted from its fire positions in the forest. The men of the renowned Rogachevskaya Division, heirs to the military fame of their front-line predecessors, were frozen in anticipation. The earth shuddered from the explosions; trails of smoke streaked the air from the rocket launchers.

"Forward!" The captain gave the command, and the tanks rolled out of the forest.

Waves of sand billowed up from the explosions of the shells and converged in a single dense cloud.

It appeared that there was no force which would be able to contain the "northern" attack. In directing tactical operations by radio Denezhkin recognized his platoon leaders by their reports, leaders who proved true and reliable assistants in this battle. Senior Lieutenant Kadinets, Lieutenant Grachev and Lieutenant Kofanov, secretary of the company party organization. Then he recognized them again when they opened fire on the "enemy" defenses. They fired their guns with such accuracy as to disintegrate the dummy self-propelled guns and camouflaged cannon and blast the other targets to pieces.

"Fire!.. Fire!".... Sergeant Romanyuk gave the command tirelessly. Private Sokol'skiy would then fire off the shot. Without taking his eyes off the smoke-filled depressions and the smoke-covered humps and knolls, holding the great power of his tank in check, their comrade Private Moiseyenko drove their tank carefully through the ruts and holes. All of them were born in Belorussia, that same land in which one out of four gave his life to save the motherland and where former partisans may be found living in almost every house. participating in the attack along with them are Russians, Ukrainians, Uzbeks, Latvians, Georgians, Armenians--soldiers of a number of nationalities bound together on the battlefields during the Patriotic War.

Under the Guards' strong pressure, the "southern" forces fell back toward the Western Dvina.

Blue Lightning

The sun on the horizon was still only preparing for its next journey across the heavens, but the Il-76 military transport aircraft were ready to take off. The mighty howl of the jet engines now filled the area. Without a few minutes the aircraft had disappeared into hazy morning sky. In one of them was Guards Senior Lieutenant Vladimir Boltikov, the commander of an "excellent"-rated airborne company, and his men. This subunit (podrazdeleniye) was to accomplish the difficult combat training mission of executing an assault landing, assembling on the march and then capturing and destroying an "enemy" tactical missile battery. It was then to prevent him from bringing up his reserves.

A dense mass of air explodes into the aircraft cabin. Vladimir Boltikov looks closely over the fields, meadows and forests sailing by under the wing.

For some reason he now recalls the words of the appeal addresses by Great Patriotic War veterans to airborne troops participating in the Zapad-81 exercise. The heroes of these fiery years have summoned Guardsmen by excellent exercise performance to inscribe a brilliant new line in the chronicle of the glorious victories of the Soviet Guard, which this year is marking its 40th anniversary.

In response to the veterans' appeal, the men of Guards Senior Lieutenant Boltikov's company came out with the initiative to develop socialist competition on a widespread basis over the course of the exercise. The airborne troops undertook heavy obligations and resolved through excellent performance in combat training to add their worthy contribution toward accomplishment of the tasks set Soviet fighting men by the 26th CPSU Congress. They called upon their comrades-in-arms to follow their example and to perform during the exercise as they would in actual combat....

The word "Go!" flashes on over the door. The signal sounds. A brief "After me!"--and Guards Senior Lieutenant Boltikov disappears out the aircraft. The other paratroopers follow him out one after another.

Stepping boldly into the void on this particular occasion was Guards Private Yuriy Ronzhin. His performance until only recently had revealed fear and hesitation. In one instance he even lost control of himself and refused to jump after his comrades. Guards Senior Lieutenant Boltikov and other officers had to put in no little work with the soldier. But the psychological barrier was ultimately surmounted, and Yuriy has become a real paratrooper.

Still several tens of meters above the ground the air filled with the sound of automatic weapons fire. This was the sound of Guardsmen engaging the "enemy" in the landing zone. First to touch the ground were men of Guards Lieutenant Sergey Mokrushin's platoon. This subunit has a good reputation within the unit (chast'): it is one of the leading subunits in the entire battalion.

Within only a few minutes the men locate their combat vehicles and speed to the assembly point. Soon the order arrived to proceed with execution of the training mission. Ahead of the company was the "enemy," who was occupying a well-fortified strong point. He met the airborne forces with heavy fire. One BMD [airborne combat vehicle] stopped. Guards Senior Lieutenant Boltikov immediately decided to send one platoon to attack the defenders from the flank, since the terrain would make it possible to execute this maneuver under concealment. Using bush and undergrowth for

concealment, the platoon, now led in place of its "disabled" officer by Guards Junior Sergeant Sergey Bubnov, moved unnoticed around to the "enemy" flank and attacked it. The surprise attack stunned the defenders, and they could not hold their strong point.

For airborne forces any exercise is a school of mastery and courage. But the Zapad-81 exercise proved especially instructive. A parachute jump, rapid assembly and, finally, "combat." And all pressing the limits of the capacities of men and equipment.

There were many difficulties. But they did not prevent the winged Guardsmen from successfully accomplishing their assigned tasks. This is evidence of the high level of moral-political and psychological preparation of these men. The terrain on which they had to land was not good for orientation. Guards Senior Lieutenant Boltikov became increasingly alarmed as he wondered whether his platoon leaders would be able to assemble their subunits in the shortest possible periods of time. But here is one of their first reports: "Ready to execute mission...."

This was a communication from Guards Junior Sergeant S. rgey Bubnov. His performance was demonstrating initiative, boldness and decisiveness. He was now responsible not only for himself and his crew, but for all his subordinates as well. Three combat vehicles, PTURSy [antitank guided missiles], machine guns--that's what kind of weapons he now had in his hands. What knowledge, skill and courage it required for him to be able to pass this test of maturity as the equal of an officer.

People often say that service as an airborne troop involves risk. And each time they emphasize that there is no such thing as a hopeless situation. The paratrooper emerges the victor from any situation. But he is prepared for this--both his muscles and his will have been tempered. Only the bold and the brave will be equal to the missions an assault landing force will be required to execute in the "enemy" rear.

The "battle" for their objective was approaching its conclusion when Guards Senior Lieutenant Boltikov received an order from the battalion commander to cover the right flank of the landing force. There was no time for hesitation. Minutes would decide everything. The situation was that as many as 10 "enemy" tanks were advancing rapidly to attack the right flank. But company troops opened aimed fire; several of the target tanks were enveloped in smoke; the rest retreated.

This incident provided a particularly clear demonstration of the cohesion among the crews, their ability to assist one another. But these human qualities, as well as others, do not, of course, appear of themselves, spontaneously. The company trains its men such that they come to think of themselves as integral components of a unit and put the interests of all above their own personal interests. The combat vehicle crew led by Guards Junior Sergeant Sergey Bubnov has only recently received replacements. But it was only a brief period of time before it had again become a single, united family. Airborne troops are always together: in the barracks, on the athletic field and in the club. And they're together in the aircraft. They have achieved what is now referred to as psychological compatibility. But the crew did not become an indivisible unit overnight. Guards Junior Sergeant Bubnov had to put in a lot of work to bring it to this point. When he took over the crew, its stumbling block was firing the machine while the BMD was in motion. The vehicle commander developed a training plan and worked with his men until he could get accurate, efficient, well-coordinated performance from them. So when the exercise called for Sergey K.arov to sit behind the controls of the combat vehicle, he took the BMD over sharply broken terrain for the highest possible rating.

It's now the last day of the exercise. The troops are standing on the parade ground. Among them are the airborne troops of Guards Senior Lieutenant Boltikov's company. They have kept their word--their exercise performance has been rated "excellent."

H-Hour

H-hour--for an air strike or a friendly salvo from the launchers on board a modern cruiser. A time for active combat operations!

...The landing ship turned in toward shore, and then a command rang out loudly from the senior assistant commander: "Landing force, go!"

The first tank appears on the ramp, the waves wetting its nose.

"Switch on hydrojets!" Then, seeing the wave hit the safety glass and "blind" the driver, Guards Seaman Aleksey Astapenko, the tank commander, Guards Junior Sergeant Valutskas Raymundas, specialist 1st class, added more calmly now: "It's a big wave; it'll cover the glass, and you won't be able to see the land. But don't be afraid, now, Alesha! Listen to me.... To the left, now to the right. Hold the nose of the tank toward the crest of the wave.... That's it! We're headed straight for our lane."

Valutskas looked back. Their tank, the first afloat, had moved to its position at the head of the echelon formation; the others were forming up on the sides of the tank afloat.

"Just like the geese fly in the spring. In a wedge.... They're heading back to their natural environment," Raymundas remarks to the naval infantrymen from Guards Senior Lieutenant Nikolay Shuvalov's company seated in the vehicle. They smile, but the expression in their eyes remains serious. Up ahead, the shore; there's where the battle is under way. They can hear the shells explode even through all the armor and the sound of the waves hitting the sides of the tank. Then a wave of loud "Hurrahs!" sweeps from the shore into the depth of the "enemy" defenses--meaning that the first strong points have been neutralized. Carrying on the fighting there are the motorized-rifle landing force brought in by helicopter and paratroopers, those bold and daring fellows, falling on the "enemy" from out of the clouds.

In the next lane, to the left of the columns of floating tanks, where the shore is steep, already making their way up the sand-covered landslide are the naval infantry who have just jumped from the air-cushion boat commanded by Warrant Officer Skiter, master of military affairs, secretary of the unit party bureau and a man well-known within the twice-honored Red Banner Baltic Fleet. Shuvalov's men know his boat well, a boat, fast and proud as a stormy petrel, from which they have had to land more than once.

Vladimir Georgiyevich Skiter--a lean man, grave and stolid in appearance...but this is only at first glance.

"You should see him in action," says grenade launcher operator Guards Seaman Vasilii Derkach. "When we were in his boat we "jumped" so far that the "enemy," not anticipating this kind of a breakthrough, and having only so few seconds to react, simply went numb and then lost their heads. Then we had them in hand-to-hand fighting.... And then, with the clink of the attackers' knives ringing in our ears, the dull hammering with the rifle butts and then with the boat slipping down off the shore into

the water we hear this warrant officer's rousing voice: "Throw them, men, throw them, destroy them...."

That's your grave and stolid man!

A few hours before H-hour, while Skiter's boat remained on the rocky shore, shuddering from the operation of its propellers like an impatient, kicking bridled stallion, the commander engaged in some conversation. To the question: "What kind of mood are you in?" Skiter replied: "I couldn't be more ready to fight!"

During one of the training periods prior to the exercise, the boat left its base to go out to the landing site. Behind the wheel was Yuriy Zhuravel', mechanic, crew starshina and himself a master of military affairs. The nose of the little airplane on the compass was pointing to a course of 100 degrees: it was an accurate course and a good ocean-going speed. But suddenly a squall came up, and the waves began to rise. The sky grew dark. Heavy, twisted tongues of water lashed the turbines.

The wind intensified, and the waves rose higher. The shore where the force was to be landed was still far away. Warrant Officer Skiter ordered the radio operator, Senior Seaman Anatoliy Nesukay, to check with the people on shore. Their reply:

"Do what the situation warrants, if necessary return to base."

"Go ahead! But Yuriy, keep the boat pointed so that the water won't whip it around so much," Skiter ordered, trusting in his boat, as well as in his crew. Skiter had checked each one of the boat's propellers with his own hands and the characters of the men of his crew he knew like the back of his hand. None of them let him down; he was certain of all of them.

"There was a certain risk involved. But there is no such thing as victory without risk. We landed the naval infantry of Shuvalov's company on shore despite all the elements."

Naval infantrymen speak with the highest praise of Warrant Officer Skiter and his seamen, Warrant Officer Skiter refers in the same terms to the naval infantrymen of Shuvalov's company. Who is this Shuvalov? What kind of man is he?

A combat officer, an experienced tactician and a communist, Guards Senior Lieutenant Nikolay Shuvalov commands an "excellent"-rated Guards company. He was born in Siberia and has followed in the footsteps of his father, a lieutenant colonel in the reserves.

Now on shore, having analyzed the situation in an instant, the senior lieutenant arrived at the proper decision: to pin down the "enemy" and contain his operations with fire from one platoon and the amphibious tanks attached to his company and then with two platoons to envelop the strong point from the flank.

At that point the "enemy" began to bring up his reserves. The commander ordered fire concentrated on them. Then began the close-range combat. The "enemy" was thus unable to deploy his forces and prevent the attackers from executing their maneuver. They attacked the strong point from both the front and from the flank.

Heavily involved in this "fighting" were the grenade launcher operators led by Warrant Officer Yevgeniy Salin: their heavy, accurate fire and the rapid assault determined

the successful outcome. Not for nothing was it that prior to the exercise the naval infantrymen had written into the first part of their obligations the following: continuously increase combat readiness and develop thorough mastery of weapons and equipment.

...The first wave of the attack has gone through leaving the stench of smoke and burning wreckage on the "battlefield." Now appearing on the horizon are the landing ships: the second wave is rolling up onto the defenders' shore....

Suddenly striking out toward the landing ships from behind a steep cliff, firing on the move..."enemy" guided missile boats. They destroy their targets with accuracy. The attackers send up aircraft. They bomb their target, leaving twisted metal and raising fountains of spray.

Fighters from both sides now wind their way into the sky: the battle in the air has begun. Antiaircraft guns boom out from both the shore and the ships. They are seconded by the large-caliber guns of the cruiser "Oktyabr'skaya revolyutsiya." Fires break out on shore; black smoke mixes with the fog, settling down low over the land and the water.

The third wave of the attack begins with the arrival of the large landing craft Krasnaya presnya, Donetskiy shakhter and others. With sides as high as three-story buildings, these large landing craft look enormous and make the mine sweepers pushing out ahead of them to clear their way of mines resemble happy little boats.

But the fog becomes thicker and thicker; only above the shore, where the "battle" still rages, it hangs in ragged tufts, the tall column of fire sent up by the shells from the Oktyabr'skaya revolyutsiya tearing through the solid cover....

And now the command from the BDK [large landing ship] Krasnaya presnya: "Landing force, go!"

"Landing force, go!" It is repeated on board the others.

So, like geese in the springtime, armored personnel carriers and amphibious tanks once again make their way in a wedge to the shore.

Then, sweeping rapidly low over the BDK, flashes of red flame blazing out under their blades as they fire their large-caliber machine guns, the attackers' helicopters move in to support the third wave of the landing.

The men of the landing force are now at the point of pressing home their attack to a successful conclusion and coming to stand victoriously on the heights with their battle colors, the same colors our fathers and grandfathers carried into their driving attacks.

Some time later the fog dispersed, the sea now clear of both it and the ships, which had returned to their anchorages; only over the shore, at last occupied by the attacking forces, the "Hurrahs!" still ring long and loud.

In these early autumn days the apples were ripening in the orchards, black fields of plowed soil split down through the golden stubble of harvested grain, herds of cattle

grazed on their water meadows--the battles of combat training were roaring off in some distant place, but here the peaceful, quiet life went on as usual.

In Belorussia and the Baltic, our Soviet soldier has been the most honored guest. The people came out to meet him in the streets of the towns and villages; they invited him into their homes, and they themselves often went out to see the soldiers. And then's when the general celebration began.

That's the way its been from time immemorial--the people and the army one, bound together by the blood kinship of generations, the same dreams and the same thoughts: "The stronger the army, the more lasting peace on earth."

In rendering their accounts before the party, the soldiers of the armed forces have been giving an accounting to the people as well. They have proved once again that the weapon with which they have been entrusted, the sharp sword, tempered in the fire of the battles and engagements of the years of the Civil and Patriotic Wars, remains a reliable shield on the ground, in the air and at sea. Like the warrior knights in the fables, they have developed an excellent mastery of it as well as others.

Ask any soldier, and he will say firmly: "Yes, I am ready, if the motherland calls, to discharge my duty to her, sparing neither my blood nor my life, just as the oath commands."

The Soviet people can be proud of soldiers like that.

CAPTIONS

1. Marshal of the Soviet Union D. F. Ustinov, USSR Minister of Defense; Marshal of the Soviet Union N. V. Ogarkov, chief of the General Staff of the Armed Forces and First USSR Deputy Minister of Defense and General of the Army A. A. Yepishev, chief of the Soviet Armed Forces' Main Political Administration at the Zapad-81 exercise.
2. Guards Colonel A. Chumakov, commander of the Orders of Suvorov and Kutuzov, Red Banner Rogachevskiy Guards Motorized Rifle Division imeni Supreme Soviet of the BSSR (left) and Guards Colonel L. Kovalev, motorized rifle regiment commander.
3. Antiaircraft missile launchers on the move.
4. The calm before the battle. Senior Lieutenants V. Polovets and Yu. Nesterov, tank platoon leaders, review their mission on the map.
4. Admission into the party. A few hours before the "battle" begins, comrades-in-arms warmly congratulate Lieutenant B. Brylin, leader of an "excellent"-rated tank platoon, on an important event--he has become a candidate member of the CPSU.
5. Guards Lieutenant Colonel N. Kalmykov, artillery regiment commander.
6. Artillerymen of Senior Lieutenant Pavel Gonchar's platoon in action against "southern" tanks.

7. Captain A. Gerasimov, combat pilot 1st class.
8. After their flights.
9. "From the skies into combat"--the airborne troops' motto.
10. Amphibious assault landing.
11. Gunners Seamen A. Sidorov, Yu. Bragin and V. Chulak are ready to repulse an attack from the air.
12. Captain 3d Rank A. Nazarenko, commander of the BDK Donetskiiy shakhter; Guards Lieutenant Colonel V. Govorov, naval infantry regimental commander, and Senior Lieutenant V. Ivanov, ship's navigator, go over the plan for the upcoming landing.
13. Senior Seaman A. Nefedov and Seaman A. Sushkin, Guards antiaircraft gunners, showed initiative in the exercise performance.
14. Guards Major V. Tugov, commander of "excellent"-rated naval infantry battalion.
15. The rapid flight of air-cushion vehicles is unstoppable.
16. Great Patriotic War veterans Ol'ga Yakovlevna Omel'chenko-Likhacheva and Boris Nikolayevich Kachaylo tell soldiers about their days as young front-line fighters.
17. Residents of ancient Polotsk gave exercise participants a warm welcome.

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ARMED FORCES

ARTICLES, SPEECHES MARKING ARMED FORCES DAY

Lt Gen V. S. Rodin Article

Ashkhabad TUPKMENSKAYA ISKRA in Russian 23 Feb 82 p 3

[Article by Lt Gen V. S. Rodin, member of Military Council, chief of Political Directorate of Red Banner Turkestan Military District: "Today is Soviet Army and Navy Day: Guarding Peaceful Labor"]

[Text] Today the Soviet Armed Forces are 64 years old. On this glorious day our people solemnly honor their true defenders--privates and seamen, sergeants and petty officers, warrant officers, officers, generals and admirals standing vigilantly on guard over socialism and peace; and they pay tribute of respect to veterans of the Civil and Great Patriotic wars as well as to those who by their selfless labor reinforce the defensive might of the Land of Soviets--the creators and makers of weapons and military equipment.

This year we are celebrating the anniversary of the Soviet Army and Navy in an atmosphere of great political and labor enthusiasm of the Soviet people caused by resolutions of the 26th CPSU Congress. Our country successfully concluded the first year of the 11th Five-Year Plan and entered the year of the 60th anniversary of the USSR's foundation full of optimism.

Our Army is the offspring of the Great October. The birth and development of the Soviet Armed Forces and their entire heroic history are linked inseparably with the name of V. I. Lenin and the work of the Communist Party. Lenin taught that any revolution is worth something only if it is able to defend itself.

The beginning of organizational development of our Armed Forces was laid down by decrees of the Council of People's Commissars about organizing the Workers' and Peasants' Red Army on 28 January 1918 and the Workers' and Peasants' Fleet on 11 February 1918. The day of courageous resistance by Red Army detachments to the German invaders--23 February 1918--was declared Red Army Day.

Historic credit goes to the Communist Party headed by V. I. Lenin for the fact that it was able to create a mass regular army with unified, centralized control, iron discipline and high personnel morale in the flame of civil war and foreign intervention.

By the fall of 1918 the Red Army had achieved great success on almost all fronts. In 1919, after crushing the troops of Kolchak and Denikin, it achieved a fundamental turning point in the course of the Civil War. The defeat of the armies of White landowner Poland and 'Vrangel' at the end of 1920 actually signified its victorious conclusion, although military operations continued in the Far East against the Japanese interveners and White Guards right up until 1922.

Toilers of Central Asia and troops of the Turkestan Front, which marked the beginning of the grand history of the Red Banner Turkestan Military District, made a great contribution to this victory.

The war German fascism imposed on the Soviet Union was the largest military clash between socialism and the shock forces of imperialism. It became the Great Patriotic War of the Soviet people for the freedom and independence of the socialist Motherland and for socialism. Under party leadership Soviet citizens rose up as one in defense of the homeland. The country was transformed into a single military camp.

This was a world historic victory over the shock forces of international reaction. The Soviet Armed Forces not only defended the independence and freedom of the socialist homeland, but also helped many peoples cast off the yoke of fascism. The victory was won through the joint efforts of a number of states, but the Land of Soviets and its Armed Forces were the chief force which blocked the path of German fascism to world domination. They bore the main brunt of war on their shoulders and played the deciding role in the defeat of Hitler Germany and militaristic Japan.

The Soviet Union's victory in the Great Patriotic War was a triumph of the Soviet social and state system, the socialist economy, and the ideology of Marxism-Leninism. The high moral and combat qualities of Army and Navy personnel were revealed fully during the war. Over seven million persons were decorated with orders and medals for heroic exploits at the war fronts. More than 11,600 were awarded the title of Hero of the Soviet Union, of whom over 800 were from our Red Banner Turkestan Military District. Among them were the grandsons of Turkmenistan K. Durdy, I. V. Bogdanov, A. Atayev, A. Agaliyev, P. Redzhepov, V. Rylov and others.

The toilers of Soviet Turkmenistan made a great contribution toward the enemy's defeat. They fought courageously at the fronts, toiled selflessly in the rear and helped prepare a formation for the Army.

The Communist Party was a true leader and general in the past difficult war. The party itself, as it was rightly called, was a fighting party in the Great Patriotic War.

Victory in the Great Patriotic War was of enormous importance for the Motherland's further advance toward communism. It had no less important an effect on the postwar alignment of the world and on the relative strength of class forces in the world arena.

For 37 years now the Soviet people have been living under conditions of peace in accomplishing creative tasks. The toilers of Soviet Turkmenistan are making a tangible contribution toward implementing the plans of communist instruction outlined by the 26th CPSU Congress.

Accomplishment of the plans for communist construction is linked inseparably with the preservation and strengthening of peace. Our party's Central Committee, the Soviet government and Comrade L. I. Brezhnev personally are steadfastly and persistently conducting a peaceful foreign policy course put forth by the 26th CPSU Congress.

But the international situation noticeably became more complex at the borderline of the 1970's and 1980's. Perceiving an interference to their aggressive aspirations in the relaxation of international tension, imperialist forces set about to undermine it. The United States, with a government which, as events indicate, is turning the rudder more and more sharply toward preparation of war against the USSR and its allies, is the chief initiator and conductor of the course hostile to the cause of detente, a course set on working up the arms race and intervening in the internal affairs of other peoples.

The United States and a number of its western allies are impudently intervening in the internal affairs of the Polish People's Republic and are attempting to change the existing balance of strategic forces on the European continent.

An activation of the aggressive, antisoviet, hegemonic policy of the present Beijing leaders, the desire of imperialist circles to take advantage of China for their own goals, and the alliance of the United States, Japan and other capitalist states with Beijing on an antisoviet basis represents a serious danger for the peace and security of nations.

The revolution in Afghanistan and the national liberation movement of nations of other countries in the Mid-East region seriously undermined the position of American imperialism here, and so the United States, China, Pakistan and other reactionary regimes of the Arab East are crudely intervening in the internal affairs of Afghanistan. The U.S. imperialists essentially are waging an undeclared war against the DRA [Democratic Republic of Afghanistan].

In the face of a direct military threat to our country and the socialist states on the part of world imperialism, the Soviet Union is forced to perfect its defenses constantly and reinforce the combat might of its Armed Forces. Together with the fraternal socialist countries the Soviet Union is persistently strengthening the unity and solidarity of the socialist community and improving the mechanism of the Warsaw Pact, the defensive alliance of socialist states, which is a powerful factor of peace and security in Europe.

The November 1981 CPSU CC Plenum emphasized that the needs of national defense are being provided for reliably. Military personnel have the most sophisticated weapons and military equipment thanks to the people's constant concern.

Workers surround the Motherland's defenders with paternal attention. Sponsorship ties are strengthening. They have been transformed into close contacts of enterprises, establishments, kolkhozes, higher educational institutions and schools with military units. Much work is being done in this direction in Ashkhabad, Chardzhou, Kushka and other cities and rayons of the Turkmen SSR. Sponsorship ties help indoctrinate military personnel on revolutionary, labor and combat traditions of the party and people.

CPSU leadership is the chief factor of our Motherland's indestructible defensive capability and a source of the Army and Navy's might. The party Central Committee, its Politburo, and CPSU CC General Secretary, Chairman of the Presidium of the USSR Supreme Soviet Comrade L. I. Brezhnev personally display a maximum of concern for increasing the combat might of the USSR Armed Forces and improving military equipment and the combat schooling of personnel.

Troops of the Red Banner Turkestan Military District occupy a worthy place in the order of battle of the grand Armed Forces. The district's role in ensuring the security of our Motherland's southern borders has risen under conditions of the growing complexity of the situation in the Middle East. This places heightened demands on officers, warrant officers, NCO's and privates in matters of maintaining high combat readiness and political vigilance.

Inspired by resolutions of the 26th CPSU Congress, the November 1981 party CC Plenum, and the speech there by Comrade L. I. Brezhnev, personnel have unfolded socialist competition under the motto "Reliable protection for the peaceful labor of the Soviet people!"

In accomplishing the difficult and responsible tasks in the current training year, all district personnel are demonstrating a heightened level of combat training and high organizational and moral-political qualities, and are displaying a profound understanding of their military duty and personal responsibility for defending the southern borders of the Soviet Union. They are celebrating Soviet Army and Navy Day with new achievements in combat and political training.

Lt Gen A. Shirinkin Article

Tbilisi ZARYA VOSTOKA in Russian 23 Feb 82 p 3

[Article by Lt Gen A. Shirinkin, member of Military Council, chief of Political Directorate of KZakVO (Red Banner Transcaucasus Military District): "Today is Soviet Army and Navy Day: A Source of Insurmountable Strength"]

[Text] GRUZINFORM--on 23 February for the 64th time now the Soviet people and personnel of the USSR Armed Forces solemnly celebrate Soviet Army and Navy Day.

The Armed Forces of our land are of one flesh with their people and their beloved offspring. Unity of the Army and the people is one of the greatest achievements of the October Socialist Revolution and a fundamental feature of an Army of a land of socialism.

As V. I. Lenin foresaw, immediately after the victory of the October Revolution the joint forces of international imperialism and external counterrevolution fell on the Soviet Union and unleashed armed intervention and civil war for the purpose of smothering Soviet power. Mortal danger hung over the young republic. To defend its revolutionary achievements and repulse the aggression of imperialism, the proletariat needed a strictly disciplined regular army. Such an army was formed by the will of the party, the will of the great leader of the Revolution, V. I. Lenin.

The days of mobilization of the people's revolutionary forces and heroic defense of achievements of the October Socialist Revolution against the invasion by hordes of German imperialism became the birthday of the Red Army. In memory of this great exploit 23 February is celebrated in our land each year as Soviet Army and Navy Day.

Inspired by high awareness of the justness of the struggle, the fighting men and commanders of the young Workers' and Peasants' Red Army displayed marvels of bravery and heroism at the Civil War fronts.

The exploit by fighting men of the legendary 11th Army was a vivid manifestation of the indestructible unity of the Army and people. The 11th Army was the ancestor of our Red Banner Transcaucasus Military District which came to the aid of its brothers, the proletariat of the North Caucasus, Dagestan, Azerbaijan, Armenia and Georgia, who were fighting selflessly for Soviet power against foreign interveners cooperating with the White Guards, Mensheviks, Musavatists and Dashnaks. Party emissaries G. Ordzhonikidze, S. M. Kirov and A. I. Mikoyan led the personnel.

This unity was displayed with new vigor during the Great Patriotic War.

Turning today to the chronicle of the Great Patriotic War, Soviet citizens again and again admire the courage, steadfastness and heroism of the defenders of Brest, Leningrad, Kiev, Odessa, Sevastopol', Kerch', Novorossiysk and Minsk, and participants of the Battle of Moscow, of Stalingrad, the North Caucasus and the Kursk Bulge, and those who carried out the operations of 1944 and 1945; and they sacredly revere the memory of those who gave their lives for the honor, freedom and independence of our Motherland.

The Battle for the Caucasus, which lasted 15 months, also was ranked along with the very largest battles of the Great Patriotic War. The Army headed by the talented general K. N. Leselidze began its campaign record at the approaches to the Caucasus. The chief of this army's political department, L. I. Brezhnev, was the heart of the army and the soldiers' political mentor.

In the menacing hour of danger Transcaucasus toilers rose in single formation to defend the achievements of October. Reserves were activated for the front and weapons were forged in Georgia, Azerbaijan and Armenia, and rations and gear moved from here to the front.

Troops of the Transcaucasus Front wore down the fascist German armies in heavy, bloody fighting and then moved into a powerful offensive to deal them a

crushing defeat. Comrade Brezhnev remarked that "our soldiers' heroism was just as insurmountable as are the peaks of the Caucasus Mountains."

A new ideological, social and international community of people, the Soviet people, arose in our country under conditions of mature socialism. The maturity of a society of developed socialism, its moral-political unity, and the prosperity and rapprochement of USSR nations also are reflected in our country's military organization.

The general character of the USSR Armed Forces enriched the content of unity of the Army and people, made it even closer, and elevated the responsibility of every Soviet citizen and every serviceman for performing the sacred duty of defending the socialist Motherland. Today this responsibility has risen even more.

In an interview by the West German journal SPIEGEL Comrade L. I. Brezhnev declared: "The earth is troubled today. Hot spots are appearing in various parts of the globe. The race of deadly armaments is continuing. New types of arms are being created, types especially dangerous for the fact that, as specialists say, they reduce the threshold of nuclear war, i.e., they make its appearance more probable."

The difficult international situation determines the need for constant high vigilance by all Soviet military personnel and unified efforts of the Army and people under the leadership of the Communist Party to strengthen national defenses.

Brought up on combat traditions of older generations and sensing that they are the vital part of their people's great achievements and the party's grandiose and inspiring plans, personnel of the Red Banner Transcaucasus Military District worthily celebrated the 64th anniversary of the Soviet Army and Navy. Having joined in socialist competition under the motto "Reliable protection for the peaceful labor of the Soviet people," they are perfecting their military proficiency with determination. This is vividly shown by results of the past training year. There was an increase in the ranks of persons outstanding in combat and political training and of rated specialists, and an increase in the number of outstanding subunits and units.

We note with deep satisfaction that sponsorship ties and the friendship of military personnel with labor collectives and figures of science and culture of Georgia are growing stronger and developing day in and day out. Participation of the heads of party, soviet and public organizations of the republic in the work of the Military Council, in party and Komsomol conferences, and meetings of the aktiv in district troops and in conducting many joint activities and various mass political campaigns has become a good tradition. At the same time, many district servicemen take an active part in the work of local party, soviet and public entities.

The 64th anniversary of the Army and Navy coincides in time with the first anniversary of the beginning of work by the 26th CPSU Congress. The Soviet people and their military personnel are implementing the resolutions adopted by the congress with enormous enthusiasm.

Having assumed a broad scope in the year of the 26th CPSU Congress and the 60th anniversaries of the republic and the Transcaucasus Military District, this work is successfully aimed at a worthy celebration of the 60th anniversary of the foundation of the Union of Soviet Socialist Republics, and it is a powerful means for further strengthening the unity of district military personnel and toilers of the Transcaucasus republics.

We celebrate Soviet Army and Navy Day as a national holiday, and not just because someone in every family has been or is in the ranks of defenders of the homeland. The Soviet Armed Forces are the pride and glory of all our toiling people and heroic people. This is the most reliable guarantee of national security and implementation of the plans of building communism, and the bulwark of peace on the entire planet.

Col Gen I. Mednikov Article

Riga SOVETSKAYA LATVIYA in Russian 23 Feb 82 p 2

[Article by Col Gen I. Mednikov, member of Military Council, Chief of Political Directorate of Red Banner Baltic Military District: "Allegiance to Heroic Traditions"]

[Text] Unshakably true to its high purpose, the Soviet Army covered a stern and glorious campaign path marked by historic victories. Our Army and people performed an immortal military exploit in the Great Patriotic War. The light of the great victory illuminates our life and the war heroes serve for the youth as a vivid example of courage, steadfastness and dedication to the socialist homeland.

Our combat traditions represent all the best from the Motherland's heroic path. They are indivisible from the glory of the first socialist state in the world and from the history of the Communist Party. It is a devotion to the cause of Lenin and to the cause of communism, love for the Motherland, allegiance to military duty, valor and courage in combat and troop comradeship. These and other remarkable traditions stem from the very class nature of our Armed Forces, the high political awareness of Soviet soldiers and their understanding of their patriotic and international duty.

Our people have been living almost 37 years under conditions of peace while successfully accomplishing the tasks of building communism. Enormous credit for this goes to our Communist Party, which is doing everything to preserve and strengthen peace on earth. At the present time the CPSU is persistently implementing the Peace Program for the 1980's developed by the 26th congress.

Meanwhile the party and state are not losing sight for a single day of the issues of strengthening the country's defensive might and combat power of its armed forces. A love of peace and readiness to give an immediate rebuff to any aggressor merge into a single whole in party policy.

The stern reality of our days is that the adventuristic actions of the United States and its accomplices have caused an intensification in military danger.

This obligates us to follow carefully the development of events in the world arena, increase political vigilance and strengthen the combat readiness of the Armed Forces.

Military-patriotic indoctrination of the Soviet youth on the combat traditions of the Army and Navy and of our Red Banner Baltic Military District is of inestimable importance for reinforcing our country's defenses. During the war years 500 Heroes of the Soviet Union were produced in district units. The defense of Liyepaya and islands of the Moonsund Archipelago, stubborn fighting at Shyaulay, Riga and Tallinn, and the heroism of Baltic fighting men in liberating Soviet soil from Hitlerite invaders went down as a bright page in the combat annals of the Soviet Armed Forces.

The Sevastopol' Red Banner Guards Motorized Rifle Training Regiment imeni Lettish Riflemen and the Orsha Red Banner, Order of Suvorov Fighter Aviation Regiment imeni F. E. Dzerzhinskiy are famous for combat traditions. The ranks of honored district units include the Guards Motorized Rifle Regiment imeni Aleksandr Matrosov and the subunit where Hero of the Soviet Union Pvt Yuriy Smirnov served and performed his immortal exploit. Other district units also have vivid combat biographies.

Now a generation which was born and grew up after the war is performing service under the renowned colors, steeped in victory. Comrade L. I. Brezhnev said at the 26th CPSU Congress that it is now the sons and grandsons of Great Patriotic War heroes who stand in the ranks of the Motherland's defenders. They did not go through the severe ordeals which fell to the lot of their fathers and grandfathers, but they are true to the heroic traditions of our Army and our people. And each time it is necessary in the interests of national security and the defense of peace, when victims of aggression must be helped, the Soviet soldier stands before the world as a selfless and courageous patriot and internationalist ready to overcome all difficulties.

Young Soviet soldiers are aware of the high honor and responsibility they inherited from their predecessors, the countrymen-heroes, and they sacredly honor and augment the grand combat traditions. Sixteen frontline heroes who fell in fighting for the Motherland are listed eternally on the rolls of subunit personnel in many district units. Their names are uttered daily at eveningroll call. This thrilling ritual has an enormous ideological and emotional effect on soldiers standing in formation.

The hero is invisibly present in the regiments and in all combat deeds of his countrymen. His bunk is made carefully and there are fresh flowers under his portrait. The right to fire for the heroes at firing ranges and exercise ranges is granted to persons who are outstanding in combat and political training. Socialist competition goes on in the units and subunits among platoons, teams and crews for the right to bear the title of the countryman-hero. This honor is conferred on the cream of the crop.

Allegiance to combat traditions and the desire to augment them with new military deeds were displayed especially vividly in the past "Zapad-81" troop exercise. The troops convincingly demonstrated a firm alloy of high technical

outfitting, military proficiency and indomitable morale in a dynamic and complex situation approximating the conditions of combat operations to the maximum.

Unit and subunit personnel of the Red Banner Baltic Military District who took part in the exercise performed their military duty selflessly, displayed courage and the ability to act and employ weapons in combat, and demonstrated high political maturity and a readiness to defend our socialist homeland reliably. Here is a typical example. Several of our subunits took part in an amphibious landing. Frankly speaking, the mission was difficult even for experienced soldiers, but here were many who had never even seen the sea in their lives. Then suddenly they were placed directly on the sea from the ship's side in APC's! The depth was several tens of meters under the armored bottom, but no one wavered. Success was assured by the soldiers' firm volitional conditioning, high combat capabilities and reliability of the equipment.

Widespread propaganda of the heroic traditions of our Army and people contributed to the capable and precise performance of assigned missions. The exercise area and the combat history of combined units and units presented great opportunities for this. Meetings with war heroes and rallies and oaths at obelisks and monuments were remembered by the soldiers, especially the young ones.

We call the memory of military exploits sacred. Courage and dedication to the homeland's ideals always have been revered as the highest civic qualities. This is what the museums of combat glory remind the Baltic soldiers of. The combat glory museum of the Proletarian, Moscow-Minsk, Order of Lenin, Twice Red Banner, Orders of Suvorov and Kutuzov Guards Motorized Rifle Division is popular not only in the district, but elsewhere in the land. The honorary title of "People's" has been conferred on the Aleksandr Matrosov Museum.

Officers I. A. Kibal', M. D. Karasev and V. L. Batrakov; Lettish Red riflemen; and veterans of the Civil and Great Patriotic wars perform active and purposeful work in the heroic-patriotic indoctrination of soldiers and the youth of the republic. Friendship of the young people with cadets and officers of military schools, with the personnel of district units and combatants of the Twice Red Banner Baltic Fleet, and with Border Guard Troops is strengthening and developing. It has become traditional in the republic to hold months and weeks of mass defense work dedicated to anniversaries of the Soviet Armed Forces and Victory Day, and ceremonial send-offs of youth to military service. They play an important role in preparing and indoctrinating young replacements called up from the Latvian SSR into the ranks of the Armed Forces.

Our district forces now are working to fulfill the plans and programs of the current training year. The intensity of classes is noted everywhere and the scope of socialist competition is expanding under the motto "Reliable protection for the peaceful labor of the Soviet people!" Following the heroes' example and the combat traditions, Baltic Military District personnel are treasuring every hour of winter combat training. In all problems and exercises they function as if in combat, display steadfastness, courage, resolve and valor, and make skilled use of modern weapons and combat equipment. The soldiers spare no effort or energy to achieve new success and raise troop combat

readiness even higher for the 60th anniversary of the foundation of the Union of Soviet Socialist Republics.

The baton of military valor is in reliable hands. Baltic military personnel are ready to perform their patriotic and international duty of defending the Motherland's state interests and the great achievements of socialism.

Col Gen Yu. Maksimov Article

Tashkent PRAVDA VOSTOKA in Russian 21 Feb 82 p 3

[Article by Col Gen Yu. Maksimov, commander of Red Banner Turkestan Military District: "Reliable Guardian of the Homeland"]

[Text] The Soviet people and their military personnel, toilers of fraternal socialist countries, and all progressive mankind are solemnly celebrating the 64th anniversary of the Soviet Army and Navy. The banner anniversary is being marked in an atmosphere of unprecedented prosperity of our Motherland's economy and culture and nationwide preparations for the 60th anniversary of the USSR's foundation. An upcoming week of shock labor is dedicated to the Soviet Armed Forces.

The USSR Armed Forces are the offspring of the Great October. Their establishment and development are linked inseparably with the work of the Communist Party and Vladimir Il'ich Lenin, creator of our party and the Soviet state and of our mighty Army.

The Red Army and Navy fought a fierce struggle against the White Guards and interveners for over three years. Building up the scope and force of attacks on the enemy from year to year, the army of workers and peasants dealt a defeat to the joint forces of the Entente and internal counterrevolution. Toilers of Central Asia and the combined units and units of the Turkestan Front, whose grand combat traditions now are being augmented by troops of the Red Banner Turkestan Military District, made a worthy contribution to this victory.

After crushing the joint forces of the capitalist world, the Land of Soviets had an opportunity to begin building a new society, a society of the workers and for the workers.

The formation in December 1922 of the USSR, a single multinational socialist state, opened up broad opportunities for the country's social, economic and cultural progress. Its defensive capability strengthened and there was an increase in the combat might of the Army and Navy and in the ideological-political unity of their personnel.

The USSR Constitution adopted in 1936 proclaimed service in the Armed Forces to be an honorable obligation of all citizens of the Soviet Union. Following that the Law on Universal Military Obligation established an equal obligation for all USSR citizens to perform military service.

The Soviet Armed Forces underwent a stern test in the Great Patriotic War. In preparing aggression against the Soviet Union, Hitler was calculating that the multinational Soviet state would fall apart at the very first blow, but he was wrong. The danger hovering over the socialist Motherland after Hitler Germany's treacherous attack on 22 June 1941 brought up all peoples of the Land of Soviets to its defense.

Soldiers of all nations and nationalities in the country fought courageously in the ranks of the Armed Forces. In October 1942 the newspaper PRAVDA wrote: "In Stalingrad, at Leningrad and in the Caucasus the blood of Russians, Uzbeks, Ukrainians, Tajiks, Belorussians, Azerbaijanians and Georgians intermingle in fierce fighting. . . . Brotherhood sealed in blood for the Motherland is the strongest brotherhood. The entire Soviet land began to fraternize in the sacred cause of defending the homeland."

The entire people rose up to fight fascism. The front and rear merged into a single combat camp. The working class, kolkhoz peasantry and intelligentsia of Uzbekistan, like those of the entire land, used selfless labor to help the soldiers defeat the enemy.

The victory over fascism, said L. I. Brezhnev, ". . . is a victory of our heroic working class, kolkhoz peasantry, and our intelligentsia; the victory of the entire multinational Soviet people. This victory of the glorious Soviet Army, an Army created by the Revolution and brought up by the party, is linked inseparably with the people."

The Soviet Army's victorious offensive brought freedom and independence to many nations. Over a million Soviet soldiers gave that most dear--their own lives--for the liberation of countries of Europe from fascism.

In accordance with alliance obligations the Soviet Army and Navy together with Mongolian troops crushed the main body of the samurai, the Kwantung Army of more than a million, in 23 days. Japan surrendered. World War II ended with the defeat of the aggressors.

Guided by the party of communists, our people defended socialist achievements, the most advanced social and state system, and their own freedom and independence, and saved mankind against Hitler's tyranny at the cost of enormous sacrifices.

The Great Patriotic War reaffirmed that the exploit for the sake of the Motherland is the standard of conduct of Soviet soldiers in combat. Over 11,600 persons were awarded the title Hero of the Soviet Union and millions of soldiers were decorated with orders and medals for courage and valor at the fronts. Among them were representatives of all nations and nationalities of the USSR.

Famous sons and daughters of Uzbekistan fought fearlessly against the foe. Orders and medals were conferred on 120,000 of them and 282 persons received the title of Hero of the Soviet Union. Turkestan soldiers wrote many vivid pages in the combat annals. Combined units and units activated and trained in our district took an active part in all the most important battles of the Great Patriotic War and covered their battle standards with unfading glory.

Communist Party leadership was a decisive force of victory for the Soviet people and their Armed Forces. This unfolded a titanic amount of military-organizational, military-economic and ideological-political work to mobilize all forces of the people to defeat the fascist German invaders and it turned the country into a single fighting camp. As in the years both of the Civil War and foreign military intervention, the Communist Party of the Soviet Union was a warring, fighting party.

The victory over fascism was a historic milestone in the destiny of all mankind and its profound consequences were today's successes of world socialism and the steadfast growth in revolutionary forces.

Our heroic people achieved new heights in creative labor in the postwar period on the path to a great goal--communism. In carrying out the historic resolutions of the 26th CPSU Congress, Soviet citizens are ensuring a further growth in public production and its effectiveness and an increase in the people's welfare.

The toilers of Soviet Uzbekistan are achieving great success. They overfulfilled the main quotas of the first year of the 11th Five-Year Plan.

Our people need peace to implement the grandiose plans for creation. The Soviet Union and other countries of the socialist community together with all progressive forces are holding a firm course toward curbing the arms race, strengthening peace and detente, and defending the sovereign rights and freedoms of peoples.

The more obvious that successes of forces of peace and socialism become, the more vigorous are the actions of champions of the "cult of force" and the policy of "brinkmanship" and their accomplices, who conceal their dangerous plans with the decrepit bugbear of the "Soviet threat." The United States of America is the chief inciter of war. It unfolded an arms race unprecedented in scope to achieve military superiority. In the next five years the United States intends to spend \$1.5 trillion for military purposes, approximately as much as all NATO countries spent for these purposes over the last ten years.

NATO plans for stationing new American nuclear missiles in western Europe and the U.S. president's decision to begin production of neutron weapons bear an ominous character. The intensifying military-political rapprochement of the United States, China and Japan and attempts to join the military might of the United States and European countries of NATO with China's human resources and Japan's industrial capacities in the East carry a serious threat to all mankind.

The situation in the Middle East and near our country's southern borders continues to be aggravated. The United States of America is setting up military bases here. It concentrated a major naval grouping in the Persian Gulf and the Arabian Sea and is arranging various provocations. The United States continues to build up the "Rapid Deployment Force," intended above all for operations in this region. The United States together with China and reactionary Moslem regimes are waging an undeclared war against the Democratic Republic of Afghanistan.

The Communist Party and Soviet government are taking every step for further strengthening of national defenses under conditions of the growing military threat. A powerful military organization is a reliable shield for our Motherland and the entire socialist community.

The Soviet Army and Navy are celebrating their 64th anniversary in a powerful status standing vigilant guard over the people's creative labor. In evaluating the personnel actions in Exercise "Zapad-81," USSR Minister of Defense Mar SU D. F. Ustinov said that the troops convincingly demonstrated the firm alloy of high technical outfitting, military proficiency and indomitable morale in a dynamic and complex situation approximating conditions of combat reality to the maximum.

The chief strength of the Army and Navy lies in the people, who are masters of modern equipment and weapons, and in their broad political outlook, high discipline and efficiency, and detailed specialized knowledge and skills. The soldiers are closely rallied about the party of Lenin and are utterly devoted to the socialist Motherland and the great cause of communism.

Leonid Il'ich Brezhnev said at the 26th party congress: "A firm alloy of high technical outfitting, military proficiency and indomitable morale--that is the combat potential of the Soviet Armed Forces. It is now the sons and grandsons of Great Patriotic War heroes who stand in the ranks of the Motherland's defenders. They did not go through the severe ordeals which fell to the lot of their fathers and grandfathers, but they are true to the heroic traditions of our Army and our people. And each time it is necessary in the interests of national security and the defense of peace, when it is necessary to help the victims of aggression, the Soviet soldier will stand before the world as a selfless and courageous patriot and internationalist ready to overcome all difficulties."

Troops of the Red Banner Turkestan Military District are a fighting detachment of the Armed Forces. They stand vigilantly on guard over the country's southern borders. Turkestan military personnel are learning to conduct combat operations successfully under difficult conditions of mountain-desert terrain and the high mountains day and night, in the summer heat and winter cold. In their operational training work and daily lives they constantly sense the attention, assistance and support of the Central Committee of the Communist Party of Uzbekistan and the government of the republic, local party and soviet entities, public organizations and all toilers.

Armed defense of the socialist homeland and strengthening of national defense is a matter for all the party, all the people, and all state and other organizations, a matter for every Soviet citizen. Their important task is a comprehensive unfolding of mass defense work and military-patriotic indoctrination of workers, activation of the work of DOSAAF organizations, and an improvement in preparation of predraft and draft-age youth for service in the Armed Forces.

Personnel of the Soviet Army and Navy are ready at any moment to repulse an attack by any aggressor, no matter what the means and methods of warfare he uses. The unity of the Soviet people and their Army and their fraternal cooperation with peoples and soldiers of Warsaw Pact nations is a guarantee of reliable defense of the achievements of socialism and peace against encroachments by aggressive forces of imperialism.

AIR FORCES

FOLLOW-UP REPORT ON TRANSIT FLIGHT

Moscow KRASNAYA ZVEZDA in Russian 2 Feb 82 p 2

[Article: "Following KRASNAYA ZVEZDA Coverage: 'Barriers Along the Route'"; original criticism was published in JPRS 80418, 26 Mar 82, USSR REPORT: MILITARY AFFAIRS No 1661]

[Text] That was the title under which Capt I. Berdnikov's letter was published on 26 December 1981. It cited facts of delays in a crew's flight and mentioned deficiencies in crew support.

As the editors were informed by Col Gen Avn I. Gaydayenko, deputy chief of Main Air Force Staff, a special commission held a thorough inspection of the organization and support of the flight by a group of helicopters along this route. It was established that this flight, in which Capt I. Berdnikov also participated, really did drag out for a long while. One of the reasons consisted of poor weather conditions along the route and at the departure and destination airfields. But during the inspection facts were uncovered of poor supervision of the flight's support on the part of certain appointed persons. A session of the Air Force military council where this matter was discussed gave strict instructions as to the inadmissibility of such deficiencies and outlined a number of measures aimed at improving the organization of aircraft and helicopter flights over long-distance routes. A special directive of the CIC of the Air Force was issued in connection with this.

6904

CSO: 1801/164

AIR FORCES

PROBLEM WITH INSTRUMENT FLIGHT TRAINING

Moscow KRASNAYA ZVEZDA in Russian 13 Feb 82 p 1

[Article by Maj S. Sarnovskiy: "Lieutenants' Take-Offs"]

[Text] A fighter piloted by Gds Lt I. Laptev took off into a lowering, cloudy sky. A whitish haze soon densely shrouded the missile-armed aircraft's cockpit windows. All attention now was on the instruments. Information on the air target was transmitted from the CP to the fighter. It was no simple matter to detect the blip from the "enemy" aircraft amidst the interference on the flickering greenish screen of the sight. But then the report already was being radioed that the target had been attacked at the given line.

The jet roar does not abate above the airfield. A tactical flying exercise is under way under difficult weather conditions. Fighters take off in pairs and flights. Laptev's contemporaries--guards lieutenants V. Doroshenko, A. Sorokin and R. Gafin--are in the cockpit of the warplanes. They did not take a back seat to the experienced aerial fighting men in any way and hit the targets with the very first launches.

The young pilots firmly took to the air, but it was not so long ago that they began performing exercises of intercepting an air target in the clouds. Initially not everything went as it should have. This worried the squadron commander, Gds Maj G. Sytnik. He carefully analyzed reasons for gaps in the lieutenants' training. He himself went up with them and observed their actions carefully. The young pilots still did not have firm skills in instrument flying. It was here that flight commanders guards captains Yu. Baranov and V. Sabirov especially needed assistance in training subordinates.

The squadron commander recommended that the instructors pay more attention to training sessions for the pilots on special systems and in the fighter cockpit, and that they themselves prepare carefully for check flights. In establishing high exactingness and demands in the squadron, the commander relied skillfully on the help of the subunit party organization. Baranov and Sabirov were invited to a party bureau session. A useful discussion was held about elevating the role of flight commanders' personal example and about skillful management of the young pilots' socialist competition.

Active dissemination of foremost experience helped improve the lieutenants' preparation for flying under difficult weather conditions. For example, at

Sytnik's advice the flight commanders planned sorties for subordinates so that the lieutenants would perform exercises in the air after highly rated aerial fighting men did so. The masters of air target intercept thus were able to tell the youth about features of operational training assignments and about how to allocate attention during instrument flying correctly.

Sensing the assistance and support of senior comrades, the young officers felt more and more confident in combat formation. In the exercise the lieutenants already were functioning at the level of second class pilots. This made a weighty contribution to fulfillment of the socialist pledges of the squadron as a whole. In the summarization of competition results it rightly was given first place in the regiment. Aviators of the subunit, which carries the high title of outstanding for the second year, are full of desire to augment successes in combat training and worthily celebrate the 60th anniversary of the USSR's foundation.

6904

CSO: 1801/164

AIR FORCES

BOOK ON FIGHTER TACTICS REVIEWED

Moscow KRASNAYA ZVEZDA in Russian 16 Feb 82 p 2

[Review by Maj Gen Avn P. Suvorov, candidate of military sciences, of book "Atakuyut istrebiteli" (The Fighters are Attacking) by A. Krasnov, Doctor of Military Sciences, Professor, Voenizdat, 1981, 191 pages: "Notes on Books: For Victory in Combat"]

[Text] Attacks by fighters in modern combat are swift. The fighter pilot has a matter of seconds at his disposal even before engaging the enemy. In these seconds he must estimate the situation and make the only correct decision for attacking the enemy. This is why considerable emphasis is placed on tactical training in the development of aerial fighting men, since it provides an opportunity to apply all knowledge and skills obtained in studying other military disciplines as a complex.

These and other issues of the development of fighter aviation tactics are examined in the book by Doctor of Military Sciences, Professor A. Krasnov, "Atakuyut istrebiteli," published by Voenizdat.

The author, who himself is a past pilot and participant of the Great Patriotic War, does not limit himself to an impassive account of the problems posed, but imaginatively analyzes contradictory trends in the development of tactics in combat against a strong enemy; he takes advantage of parallels and comparisons; and he reveals common points which in the final account makes possible the transition from specific evaluations to broad generalizations.

Current problems of the commitment of fighters, their interaction with ground air defense weapons, control of combat, use of the factor of surprise and other problems are covered in an entertaining manner and at the same time from a scientific position. Extensive factual material from the history of Soviet and foreign aviation is used to trace how missions, combat formations and fighter tactics have changed as aviation technology has developed and the art of aerial combat has improved. The author compares the experience of the past with actual contemporary reality, which permits a deeper understanding of the principles in the development of tactics.

The book also examines features in the work of aviation commanders when they make decisions, plan aerial combat and control it from the ground and in the air. Interesting questions are posed about the interrelationship of the

commander with the latest automated control systems, which are acquiring special urgency in the era of the scientific-technical revolution in military affairs.

It stands to reason that the book is not free of deficiencies. For example, nothing is said about problems of tactics in the struggle for air superiority or in screening rear area facilities of the country. In addition, there are a number of inaccuracies and slips in covering matters of raising the tactical expertise of flight personnel.

But all these shortcomings cannot reduce the book's merit. It teaches a great deal and forces one to think, analyze and draw independent conclusions. Herein lies its indisputable value.

The book is intended for flight and command personnel of the Air Force. It can be recommended for commanders and staff officers of other branches when they organize combat actions with aviation participation, as well as for cadets and students of military educational institutions.

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CSO: 1801/164

GROUND FORCES

AIRBORNE ARMORED VEHICLE DESCRIBED

Moscow VOYENNYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) pp 40-41, rear cover

[Article by Engr-Col V. Knyaz'kov: "Airborne Combat Vehicle"]

[Text] Our "winged infantry"--the airborne troops-- are equipped with the BMD-1, the airborne combat vehicle. It weighs 6.7 tons. The crew consists of seven men. They are the vehicle commander, the deputy who is also the gunner-operator, the driver-mechanic, senior rifleman, machinegunner, grenade launcher, and assistant grenade launcher. The commander, driver-mechanic, and machinegunner are located in the driving compartment which occupies the hull nose of the armored hull. The other crew members, headed by the gunner-operator, are located in the middle compartment. The vehicle also contains an engine compartment. It is unoccupied, located in the rear part of the hull, and separated from the middle compartment by an airtight partition.

The paratroopers are very proud of this vehicle. And there really is something of which to be proud. The BMD-1 vehicle is a combat vehicle, armored, tracked, amphibious, and droppable from the aircraft by parachute or the parachute-rocket method. Even from this brief definition, it is evident that this model of Soviet armament has been endowed with remarkable combat and tactical qualities

Let us begin with the most important thing which is rightly placed in first place: the BMD-1 vehicle is a **/combat vehicle/** [in boldface]. This definition is abundantly clear: it was created for combat, and more precisely--for the conduct of combat operations, and it has the appropriate onboard armament. We stress especially--the level of firepower of the BMD-1 is very high. And by the words "appropriate onboard equipment" we mean the gun, PTUR [antitank guided rocket] complex, four machineguns (of them three tank-type), hand-held antitank rocket launcher, five automatic rifles, and 20 grenades. We note that the AKMS automatic rifle, RPKS light machinegun, RPG-7D grenade launcher, and F-1 hand grenades are the crew's personal weapons.

The gun on the BMD-1 is 73-mm caliber, smoothbore, and semiautomatic. It is intended for the destruction of enemy personnel and weapons. It can be used to fight tanks and other armored targets. Point-blank range is up to 765 meters. Maximum sighting range is 1,300 meters. Rate of fire is up to six or seven rounds per minute. Although loading is manual, it is combined with mechanized ammunition

stowage of the conveyer type which is located on a rotating platform in the middle compartment. The design principle is simple. Recesses for the artillery rounds are placed on an "endless" belt. There are 40 rounds. This is also the gun's unit of fire. When turning on the drive the conveyer moves and the artillery rounds are fed to the work site of the gunner-operator one after the other. Take and load.

Coupled with the gun is the PKT machinegun (Kalashnikov tank machinegun) caliber 7.62 mm. Thanks to the use of an improved sight its maximum sighting range reaches 1,300 meters. The practicable rate of fire is 250 rounds per minute and the cartridge feed is by belt. We call attention to one important feature. A special stowage of the machinegun belts is employed here, which permits conducting fire from the machinegun without reloading until the complete expenditure of the entire unit of fire of 2,000 cartridges.

A small finned rocket is located alongside the gun and above it. This is also the PTUR (antitank guided rocket). The same complex about which it can be said that little bodies have great souls. Let us say directly that this is an extremely important component of the armament on board the vehicle. Its purpose is completely specific: to combat moving and stationary armored targets. This has primary significance for the BMD which is operating in the enemy rear area. In any most difficult situation the paratroopers can adopt a bold decision and enter into single combat with a tank, self-propelled artillery mount, or armored personnel carrier.

The gunner-operator can hit targets at ranges from 1,000 to 3,000 meters. In exceptional cases which are dictated by the combat situation fire at a range of 500-1,000 meters is permitted.

The PTUR complex consists of a miniature launching bracket and guide rail with the rocket. The launching bracket is mounted on the moveable armored shield and carriage of the gun. And the guide rails which are part of a set with the rockets are located in ammunition stowage boxes within the vehicle. There are three of them and they comprise the unit of fire.

The purpose of the hull machineguns--there are two of them--is to fire at ground targets, primarily at personnel, open weapon emplacements, and lightly armored targets. The machineguns are also mark PKT and also 7.62-mm caliber. This is convenient. So that all three machineguns have virtually the same combat characteristics. But there is also a difference. The greatest sighting range of the hull machineguns with the use of the sight is up to 800-1,000 meters. The number of cartridges in a belt is 250.

The vehicle's firepower can be additionally increased. In what way? By the crew's firing of the AKMS assault rifles and the RPKS light machinegun directly from the vehicle. Three firing ports with spherical mountings and observation instruments are specially provided for this: one on each of the vehicle's sides in the middle part of the hull, and the third--in the lid of the rear hatch. The side mounts can be closed and opened manually with armored flaps, and the rear one--by a plug.

Just what influence can one BMD-1 exert on the enemy if it is operating "autonomously?" The BMD-1 can fire up to 7 aimed rounds and more than 1,000 bullets in one minute on a given sector. But there is one more circumstance. Both the armament

and the crew are arranged in the vehicle so rationally that a zone of continuous fire can be created around it at any moment.

The BMD-1 possesses good trafficability. The length of the track's bearing surface is 2.8 meters; hence the extremely insignificant ground pressure. Its mean value is approximately 0.5 kilograms per square centimeter, which corresponds to the ground pressure of a grown adult. The conclusion--if a soldier can pass, so can the BMD-1.

The clearance (the ground clearance, the distance from the surface of the ground to the lowest point on the vehicle's construction, to the hull floor) can be adjusted on it. It affects the vehicle's trafficability when it moves cross country, including over swampy places, snow banks, stumps, and over roads with deep tracks. Without leaving the driving compartment, the driver-mechanic can change the clearance from 100 to 450 millimeters. For this, it is sufficient to move the small lever on the central control panel to the "Raise" or "Lower" position.

The degree of track tension can be varied in the same way. What does this provide? It turns out that the shock absorption of the BMD-1 and its trafficability are improved and the vehicle's resistance when moving afloat is decreased.

When crossing artificial and natural obstacles with the vehicle, it is capable of overcoming angles of up to 32° when rising and up to 18° of banking. Since the BMD-1 is amphibious, it makes sense to also mention the following specific indices: angle of entry into the water from the bank-- 30° , and angle of exit from the water--up to 25° .

The BMD-1 is able to move forward afloat at a speed of up to 10 kilometers per hour and in reverse at a speed of 1.5 kilometers per hour. Its range on one fuelling afloat is from 96 to 116 kilometers.

What is the source of these capabilities? The entire matter is that the designers employed hydro-jet engines in the airborne vehicle. Up to now, we had the concept of a caterpillar engine, and now we have encountered a hydro-jet engine. Does this mean that it throws the water? In the literal meaning of the word--yes.

We recall how a rocket rushes upward. A jet engine operates here. It ejects incandescent gases with tremendous speed. As the mechanics say, the principle of direct reaction is being implemented: gas particles fly in one direction, and the rocket--in the opposite direction. If we now descend into the depths of the sea and see, for example, how a squid moves, we will see an amazing picture. It takes in water and ejects it with force through the muscular orifice to the outside. A portion of the water flies in one direction and the squid swims in the opposite direction. How, we say, does this differ from an underwater jet engine? By the way, a big squid can "shoot" itself with such a force that it flies above the surface of the sea to a height of up to seven meters.

Here a similar jet apparatus is also used in the design of the vehicle. An axial water pump injects the water, and it is ejected to the outside through water-flow tubes; a reactive force is created which moves the BMD-1 forward. Two hydro-jet engines are installed on the vehicle--along each side of the hull.

As regards the vehicle's mobility, it is characterized by very good indices. Over a dry dirt road the BMD-1 can move at a speed of up to 35 kilometers per hour, and on a highway--up to 61 kilometers per hour. Its range on one fuelling is rather great--up to 500 kilometers.

The airborne combat vehicle is well adapted for operations in a forest and populated places. Its turning radius is 2,380 millimeters. The driver-mechanic can turn the vehicle "on a dime."

Such qualities are extremely valuable in battle when, at times, it is necessary to accomplish a jerk to the side, maneuver sharply, get out from under fire with a rush, and so forth.

Above, when the definition of the vehicle was given, it was indicated that it can be dropped by parachute or the parachute-rocket method. What is this? If it is said--by the parachute method, it would seem to be clear: to drop by parachute. However, it is one thing when a paratrooper weighing less than 100 kilograms jumps, in which regard a live person who is capable of controlling the parachute, making an estimate of the situation and, in general, acting. And it is quite another thing when heavy combat equipment is dropped by parachute. Let us recall once again--the weight of the BMD-1 is 6.7 tons. Here we have its special features and difficulties which, in general, have been solved successfully. But it has also been said that the drop may be accomplished also by the parachute-rocket method. Here we will speak of this in a little more detail.

"Directly at the ground the soft-landing motors were activated and the spaceship landed safely in the assigned area of the USSR's territory"--such information no longer surprises anyone, it is a usual matter. But here we are interested in the soft-landing motors because something similar has also been adapted for dropping the BMD-1. The designers have developed a parachute-rocket system whose task is to deliver the combat vehicle to the ground from a tremendous altitude carefully, intact, and safely.

It consists of two basic parts: a parachute system and a rocket motor. They work sequentially. While still on the ground, the BMD-1 is placed on a cargo platform and a parachute-rocket system is placed and fastened on the vehicle, on top. Here the word "system" was not used by chance since it actually includes several parachutes, each of which performs strictly determined functions.

Let us assume that an airplane arrived at the drop zone, gained the assigned altitude, and went on the established course. The cargo hatch opens and after a time the command "Drop" is given.

The pilot parachute goes into operation first. It is ejected from the airplane; its canopy, approximately two to three square meters in size, is instantly filled with air and drags the cargo platform from the airplane with a jerk. There is also a supporting canopy which has a local task, more exactly auxiliary. It seems to support the pilot parachute and does not let it collapse.

The platform approached the ground and, at this time, the stabilizing parachute begins to operate. Its canopy is filled with air and the platform's speed of descent

reaches 50-60 meters per second. At an assigned, "programmed" altitude the stabilizing parachute is separated and the canopy of the main parachutes, the area of each of which is a little less than 1,000 square meters, is filled with air. The platform begins to descend at a rate of 15-20 meters per second.

The rocket motor is also prepared for operation automatically in accordance with a program. A generator generates an electric current. At the same time, special feelers--they are the motor sensors--turn around and occupy a vertical position below the platform. As soon as the feelers touch the ground, an electric circuit is closed, pyrotechnic cartridges are activated, and the motor's powder charge begins to burn.

On the whole, the rocket motor operates for a very short time, literally for several fractions of a second, but it develops considerable thrust--approximately 20 tons. It is directed vertically upward. Because of this, the cargo platform with the vehicle touches the ground, as they sometimes say, with zero velocity.

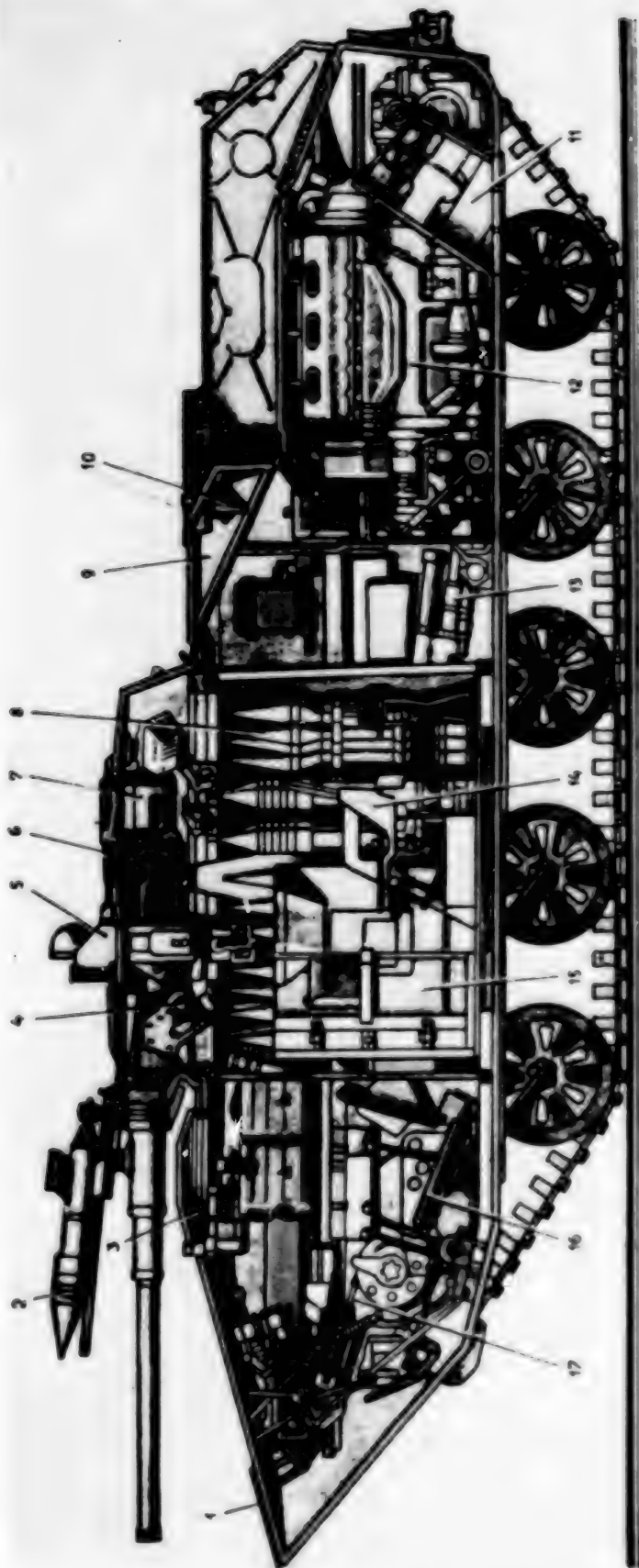
The vehicle has improved observation and aiming instruments thanks to which the firing capabilities of the armament are increased substantially. In which regard, there is no significance concerning under which conditions firing is conducted--day or night. Destruction of the targets is guaranteed because their search and aiming from the gun and coupled machinegun are accomplished using a combined periscopic sight. As they say, it is "daytime-nighttime" and well adapted for operation under various weather and climate conditions. And, first of all, due to the simple and successful design for drying and warming the outer glasses. A glass shield is also envisaged--it reliably protects the entrance opening of the sight against smoke and temperature effects when firing the antitank guided rocket. There is also a mechanical cleaner which is installed on the outside.

There is a shutter mechanism to protect against illumination. And what is it? The fact is that the night sight is an unilluminated electron-optical instrument of high sensitivity. As soon as any powerful light flash suddenly arises at night, this mechanism is activated without fail. The shutter is closed and protects the sight against operation in an overvoltage mode.

An R-123M radio is installed on the BMD-1. It is very compact, reliable, and withstands vibrations and shaking well. Using it, the crew establishes communication in the microtelephone mode out to a distance of up to 20 kilometers. And inside the vehicle the crew members talk among themselves using the TPU--tank intercom. Altogether five throat microphones are made.

And the last about the BMD-1. Its hull has excellent airtight sealing. Thanks to this, the system for the collective protection of the crew against the effects of radioactive dust and toxic agents operates reliably and it is provided normal habitability conditions.

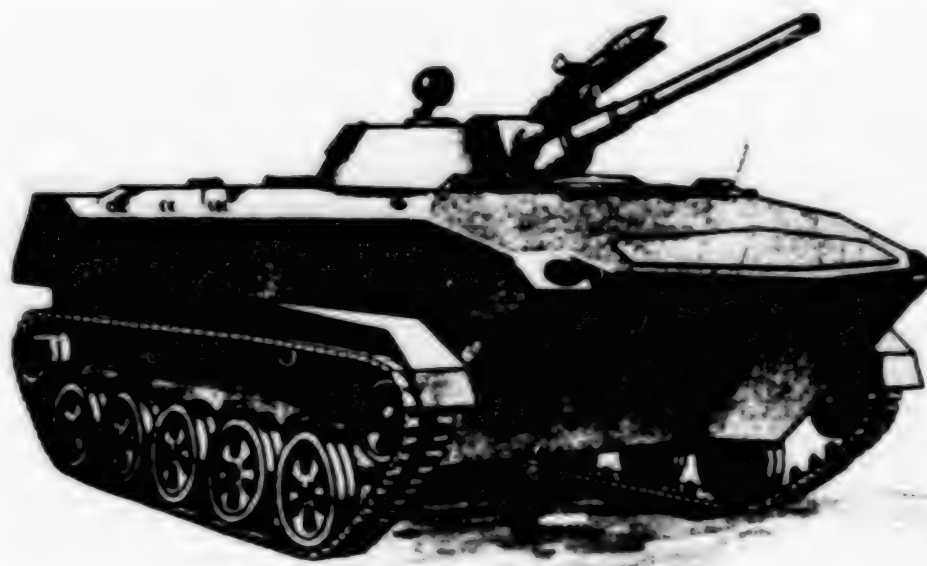
A system of fire-fighting equipment, a smoke generation system, and water-pumping equipment are also installed on the vehicle. All this increases noticeably the survivability of the airborne combat vehicle and its protection.



The BMD-1 [key on next page]

Key:

- | | |
|------------------------------------|-----------------------------------|
| 1. Water-deflecting shield | 10. Observation instrument MK-4s |
| 2. Antitank guided rocket | 11. Hydro-jet engine |
| 3. Driver-mechanic's hatch | 12. Engine |
| 4. Gun elevating mechanism | 13. Pneumatic compressor |
| 5. Gun sight | 14. Gunner-operator's seat |
| 6. Gunner-operator's hatch | 15. Cartridge used-link container |
| 7. Observation instrument PNPO-170 | 16. Driver-mechanic's seat |
| 8. Artillery round | 17. Track tightening mechanism |
| 9. Escape hatch | |



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CIVIL DEFENSE

TRAINING AND RELATED ACTIVITIES: AT THE GORKIY 'DVIGATEL' REVOLYUTSII' PLANT

Moscow VOYENNNYYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) pp 12-13

[Article by I. Semenychev, director of House of Culture, Gorkiy "Dvigatel' Revolyutsii" Plant: "In Our House of Culture"]

[Text] The House of Culture of the Gorkiy "Dvigatel' Revolyutsii" Plant has been conducting active work in propagandizing civil defense for many years, achieving the workers' and employees' deep understanding of the effectiveness of measures in protecting people and the installation from contemporary weapons. The Board of Directors of the House of Culture plans, organizes, and conducts it under the direction of the plant's party committee and in close contact with the civil defense [CD] staff and trade union, Komsomol, and DOSAAF organizations.

The permanently operating lecture bureau on civil defense, where talks and lectures are conducted monthly, enjoys great popularity among the plant's workers. The increased role of civil defense in ensuring the state's vital activity in wartime and the reliable protection of the population against contemporary means of destruction is explained in a well-reasoned manner. The lecture bureau is functioning under the slogan, "Civil defense knowledge--for all." Many CD subjects are included in the training plans of faculties of the people's university and various clubs. Civil defense activists come forth with talks and show motion picture films on civil defense in the shops and divisions during dinner breaks and shift changeovers.

Once a month, the local radio gives broadcasts to assist those studying civil defense. We also organize question and answer evenings, quiz games, and oral journals. Their goal is to acquaint the workers with the methods and means for protection against weapons of mass destruction and to teach them procedures in rendering self-help, mutual help, and first aid to casualties. We learn ahead of time from the workers and employees which questions interest them and then, in the course of the soiree, after a short talk on one subject or another we give the answers with the showing of graphic training aids. At the end of the evening we show those assembled a training film.

The quiz games, "Do you know," proved to be most popular. All those present participate in them. They prepare thoroughly for them and read the recommended literature. Prizes and commemorative gifts are awarded for the best answers and actions.

We also practice the conduct of youth soiree-competitions for the best knowledge of the principles of civil defense under the heading, "Now then, fellows!" Teams from the plant shops and divisions participate in them.

Civil defense motion picture festivals have become a tradition with us. The subject matter of the films is the most varied. In general, we showed everything available at the film rental base. As a rule, the showings of the films are preceded by four- or five-minute presentations by CD leaders, experts, and activists which greatly contribute to the increase in knowledge. After the viewing we organize a discussion of the films. By the way, we often use the films in the role of motion picture journals prior to the showing of artistic films.

In addition, the personnel of the House of Culture and the enterprise staff draw up displays and show cases, "Everyone should know and be able to do this!" And as practice shows, they help the population to consolidate its knowledge and to popularize the experience of the labor collectives, formations, and leaders in the accomplishment of CD tasks.

Civil defense corners have been set up in all shops and departments for this very purpose. They graphically reflect the organizational structure of the non-militarized formations which are created on the base of the shop (department), their missions, the procedure for dispersal of the workers and employees and evacuation of the members of their families, actions on warning signals, and other questions. In which regard, all this is shown with consideration of the special features of each shop.

We also allot an important place to propagandizing CD among the non-working population which resides in the plant's housing sector. At summer agitation sites and in red corners of youth hostels lectures are given and talks and meetings with personnel of CD organs are conducted. Shop and territorial party organizations render inestimable assistance to us in this matter.

The associates of the House of Culture's library are conducting active work in the propagation and propagandizing of literature and graphic aids on civil defense. They organize quiz games and exhibitions and surveys of literature on civil defense. As a rule, the surveys are conducted on special subject matter or with the arrival of innovations.

The role of propaganda increases especially in the period of the preparation and conduct of civil defense exercises. Personnel of the House of Culture, libraries, DOSAAF activists, and other public organizations are involved in it. They explain to the participants of the exercises their specific tasks at each stage and propagandize the skillful actions of those who distinguished themselves. Wall newspapers, operational news sheets, and printed news flashes are directed toward this.

We work out work plans for the year jointly with the CD staff, coordinating them with the party committee of the enterprise. And practice shows that prior planning and thorough preparation of all planned measures and their coordination by times and place of conduct with consideration of the special features of each population category permit conducting propaganda in such a way that not one person remains outside of its sphere of influence. Accurate aiming at specific students, viewers, and readers and at a specific labor collective improved noticeably the effectiveness of

the propaganda. The link of the House of Culture and the library with party and trade union, Komsomol, and DOSAAF organizations of shops and divisions and their leaders has become more organic and stronger.

The approach to planning has also changed. We do not simply envision the needed measure. Prior to planning it, the members of the Board of Directors and our activists consult with the leaders of the labor collectives and party, trade union, and Komsomol organizations and study the demands of the workers, and then they participate directly in the preparation of the planned measures.

One other thing should be noted. If formerly all work was conducted basically in the House of Culture and the library, you now encounter "red corner of the hostel," "summer agitation site," "shop," and so forth quite often in the column "place of conduct."

Of course, the realization of such a plan is a difficult matter which requires great creative efforts, but also a noble one since it brings unquestioned value to the people and deep satisfaction to us. It was pleasing to learn, for example, that the CD staff of Gor'kovskaya Oblast and the oblast trade union council consider our House of Culture the best in the organization of CD propaganda. But we realize that as yet not all reserves have been put into operation. The search for them is continuing. And its goal is to consolidate the experience which has been accumulated and to continue to improve the forms and methods of work in propagandizing civil defense and raise its effectiveness.

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CIVIL DEFENSE

TRAINING AND RELATED ACTIVITIES: MORE ON THE 'VORONEZH EXPERIMENT'

Moscow VOYENNNYYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) p 16

[Article by Lt Gen D. Mikhaylik, deputy civil defense chief of the USSR: "A Useful Undertaking"]

[Text] The further development of the training material base in the civil defense system is an important question which, to a great extent, determines the quality of practical training of the country's entire population, non-militarized formations, and especially of the supervisory and command personnel in protection against contemporary weapons. And it is good that the editors of the journal VOYENNNYYE ZNANIYA conducted on their pages an exchange of opinions on the articles "On Training Centers" and the "Voronezh Experiment."

What can be said in this regard? First, it should be stressed that the training grounds, those created and under construction, are the basis of the practical training of the non-militarized formations and the installation's entire labor collective. This is the truth.

However, it is necessary to specify just what is occurring locally. For in a number of rayons training grounds and training sites were constructed without consideration of requirements, and if the population and formations study there, the percentage of use of these training installations is very small. There is also another extreme -- in general there are no training objects either at installations or in rayons and, in places, in the entire city. For example, it is difficult to believe that there is not one training ground in such a big industrial center as Cheboksary.

Both extremes are intolerable. The task consists in approaching the solution of this important question wisely and intelligently, studying attentively once again and, on the basis of a thorough analysis, determining where to build the training grounds and training sites with consideration of the type of installations. And the plans for their construction and use should be approved in the appropriate soviet organs so that each installation and each non-militarized formation, housing institutions and educational institutions receive the opportunity to conduct practical lessons on the training grounds. Experience in the construction of training objects has shown that they should be created primarily on a cooperative basis, so that they are used to the maximum and in a planned manner, and so that not one of the training grounds stands empty. The chiefs of CD [civil defense] staffs and, first of all, of the rayons and cities should bear responsibility for this.

In discussing the articles about civil defense training centers, the CD chiefs of staff of the Kuybyshevskaya, Tul'skaya, and Gor'kovskaya oblasts Comrades A. Shevchenko, B. Pulin, and Yu. Amosov, and the deputy CD chief of staff of the Ukrainian SSR, Ye. Kuz'menko, as well as other comrades correctly stressed that the training ground at an installation or for a group of installations is the basis of practical training. But the comrades are also correct in that now we can no longer restrict ourselves to training grounds and training sites. Construction of training centers in big cities following the example of the Voronezhites, and first of all in oblast and, perhaps, in several rayon centers as is written about by the master of production instruction of the Novograd-Volynskiy courses, I. Podiyenkov, is a promising matter. This will be a step forward in the development of the CD training-material base.

What is attractive here? I believe that good prospects are opened up to raise the quality of training, especially of the supervisory and command personnel and civil defense specialists and for the practical training of non-militarized formations of installations located not far from these centers.

It is not by chance that each participant in the discussion asserts: civil defense courses have a great need for training centers. And this is correct.

In the Voronezh experiment, as Comrade Kuz'menko stresses, attention is merited by the equipping and outfitting of the center itself which creates conditions for the conduct of special tactical exercises, competitions with various non-militarized formations, lessons with students of higher educational institutions and pupils of secondary special educational institutions, training-methods assemblies of supervisory personnel, lessons with students of CD courses, and practical lessons with the military instructors of schools on a high level, and here the personnel of staffs learn to control CD forces. Many other measures are also implemented here.

We say that we should construct training centers similar to those in Voronezh proceeding from local conditions and capabilities. But we repeat once again: here we should in no way belittle the significance of training grounds which have been created at installations of the national economy and in cities and rayons and which support the practical instruction of CD personnel under the specific conditions of each installation.

Did the idea of building training centers appear spontaneously? Unquestionably, no. It is the result of the further development and improvement of the system for training the population for protection against weapons of mass destruction and the use of accumulated experience. And it is not by chance that such centers began to be created in other cities almost simultaneously with the Voronezh center. In this regard, it is interesting that they are far from identical. Thus, in Kuybyshev, they proceeded along another path in connection with the city's territorially scattered nature. It is impossible to build a single training center there; therefore, they constructed four training grounds in various rayons of the city and two special ones beyond the city limits (gas supply and the Volzhskaya GES). And now a special training ground has also been planned in Novokuybyshevsk with consideration of the special features of the technology of the oil refining industry. And this is praiseworthy.

Of course, the creation of new, big training installations is an important matter and should be approached cautiously. The work of the CD staffs also becomes complicated here. This means that in the oblast, kray, and republic it should be undertaken only when all the plusses and minuses have been thoroughly studied and weighed. For example, they proceed in just this manner in the Russian Federation. At the very beginning, they attached a planned and organized nature to this. They thoroughly studied where to build the training centers and where to develop the training-material base in other ways. It is good that at one of the next few republic-wide conferences of CD chiefs of staff of krays, oblasts, and autonomous republics of the RSFSR it is planned to conduct a special discussion of the materials in the journal VOYENNYYE ZNANIYA which were published in connection with the articles, "On Training Centers" and "The Voronezh Experiment," and to determine the optimum variant in the development of the civil defense training-material base. A scientific approach to the solution of this problem is needed. Let us recall again: here we must not hurry or speak abruptly. We should analyze all conditions, think things out comprehensively, and weigh and determine how effective it will be to use the center and who to train there.

Evidently, we should be more occupied with questions of the long-term development of the training-material base so as to make a new qualitative leap in the next few years in the practical training of civil defense forces, especially its supervisory and command personnel.

And one more thing. It is also very important in the experiment of the Voronezhites that a big training installation has been constructed virtually on the voluntary service principle, from substandard materials, and with the minimum expenditure of monetary resources. The comrades used everything: exercises of subunits and formations, summer assemblies of students conducted by institutes, the assistance of industrial enterprises located nearby, and much more.... The initiative, strength of organization, and high sense of responsibility of the oblast CD leaders were displayed here. All this should be learned from the Voronezhites, their experience should be studied, and it should be used as applicable to one's own conditions.

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CIVIL DEFENSE

TRAINING AND RELATED ACTIVITIES: AT VARIOUS ENTERPRISES

Moscow VOYENNYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) pp 18-19

[Series of articles published under the heading "Effectiveness and Quality for Training;" titles and authors as indicated]

[Text] Training in accordance with civil defense programs at installations of the national economy is taking place under the sign of increasing effectiveness and quality and the greatest return from each lesson and exercise. This is also discussed in readers' letters.

At General Services Installations

In accordance with my service duty, I often assisted various installations of the national economy to prepare and conduct combined exercises. And each of them differed in some way. Take our city general services combine where such an exercise was conducted with a group of its installations for the first time. I had the occasion to be an umpire on it.

Medical-washing posts (SOP) were actually set up for the first time on the basis of city baths and showers which, naturally, made its imprint on the preparation and conduct of the exercise. In particular, in the preparatory period special-tactical exercises were conducted with all SOP teams. The sequence for the set-up, reception of casualties for medical processing and medical examination, dosimetric checking, the actions of the sections in the showers, repeated medical examination, and dosimetric monitoring was worked out in detail. Attention was directed to the practical study of such questions as the issuing of clean processed clothing, documents, and valuables and to the sequence for sending people to their place of residence and work.

Special tactical lessons and exercises also took place with civil defense (CD) formations created at other installations of the city combine (with voluntary aid detachments, sections for servicing protective structures, and others). Two staff drills were conducted with supervisory and command personnel. The training period was concluded with a KShU [command and staff exercise].

The combined exercise began with warning and assembly. Specialists of the combine, chiefs of general service installations and city baths, and commanders and political deputies of non-militarized formations assembled at the control post. The

director, civil defense chief L. Yurina, assigned them tasks for the conduct of primary measures in accordance with the installation CD plan. The staff was ordered to organize round-the-clock duty, check the readiness of communications with all subordinate installations and commanders of non-militarized formations, and establish monitoring of the accomplishment of measures with the threat of "enemy" attack.

The secretary of the party bureau, R. Man'kovskaya, acquainted those assembled with the plan for party-political work and assigned specific tasks to communists for the conduct of talks with the workers and employees and the personnel of formations and for the publication of news bulletins and drawing up graphic agitation.

The exercise continued. The construction and equipping of anti-radiation shelters was initiated at all installations. Through the staff and personally, Comrade Yurina checked how matters were proceeding. And if there were not enough construction materials someplace, she immediately issued instructions to the chief of material and technical supply: submit a requisition to the oblast general services combine. She was especially concerned that all SOP's were supplied with instruments for dosimetric monitoring and the observation posts--with radiation and chemical reconnaissance instruments.

When problems in the reception of evacuees were worked out, all SOP's were brought to complete readiness in case of the urgent medical processing of the arrivals. In particular, the special situation was issued: "Among the evacuees were persons with gastro-intestinal diseases and they are isolated in the nearest medical institution." In accomplishing it, the CD chief of the city general services combine, L. Yurina, ordered the notification of all general services installations and baths about this and the conduct of sanitation-prevention measures.

During this same period, with their own forces they made PTM-1's [antidust fabric mask for protection from radioactive dust] and cotton gauze bandages for all personnel of the city general services combine and laid in a supply of disinfectants.

The situation became more complicated. According to reconnaissance data, the "Shakhter" general services installation found itself in the zone of radioactive contamination. It was urgently necessary to conduct the medical processing of the people and dosimetric monitoring and to render first aid to those who had been subjected to "irradiation." Under the direction of Ye. Vit'ko, this was skillfully accomplished by the personnel of the medical-washing post which had been set up on the base of bath No 1 and by two teams of the voluntary aid detachment. Dosimetrist A. Vlasova operated skillfully and competently.

I should like to stress that everything on the exercise was done in a practical manner. This is to the great credit of the CD chief of the city general services combine, L. Yurina, the secretary of the party bureau, R. Man'kovskaya, and the CD staff headed by L. Pluzhnik.

N. Koretskiy, master of production instruction of city CD courses, Krasnoarmeysk, Donetskaya Oblast

They Operated Skillfully and Smoothly

The training of mobile clothing supply points (PPVS) which have been created in the system for the trade and catering service is also envisioned in the difficult complex of tasks being accomplished by civil defense. Special tactical exercises are one of the most improved forms for training their personnel.

In the Vladivostok city establishment for trade in manufactured goods PPVS's have been formed on the base of manufactured goods shops. The exercises were planned by the trade civil defense staff at the place of disposition. Special sites with barriers and signs are set up on the territory of the stores. Non-standard equipment manufactured for the set-up of the points under field conditions is arranged compactly here.

Sets of clothing and footwear are laid out on collapsible tables for issue. Alongside on odd sizes of lumber are cardboard boxes on which the designations, sizes, and quantity of manufactured goods of primary necessity are indicated. Near each work site is a board with arrows. Tents have been pitched nearby. Supplies of goods are stored in them.

The special tactical exercise with the fighters of the mobile clothing supply point created on the base of store No 52 began with an inspection in the ranks. The chief of the PPVS, store director V. Pozyvaylo, reports readiness for operations to the director of the city establishment for trade in manufactured goods. All fighters are in camouflage suits, rubber boots, and blue berets. Among them are experts of training salespersons T. Azhchikhina and I. Artamanyuk who were repeatedly commended for active participation in CD measures.

Red arm bands with the appropriate inscription distinguish the team commanders--section chiefs T. Lyakhova, E. Usikova, and R. Kogina. The umpires check the equipment and conduct a check questioning, checking knowledge of functional duties.

In the course of the exercise, each team works out the procedure for making up sets of and issuing changeable clothing and footwear with the drawing up of invoices and bills and maintenance of clothing accountability logs and methods for the protection of merchandise valuables and the decontamination of clothing and footwear. It was felt that all fighters of the formation had performed these actions on practical lessons many times. Now they consolidated knowledge and skills. Distributors S. Chumanova and N. Yefremova especially distinguished themselves.

On the whole, the mobile point under the direction of V. Pozyvaylo operated skillfully and smoothly. And this is not by chance. For its chief himself knows his business well and is able to train and indoctrinate his subordinates, for which he was awarded the badge "Expert of Civil Defense of the USSR."

Ya. Kantor, Vladivostok

Accelerate Monitoring

Our plant has the necessary training-material base for the training of workers and employees as well as non-militarized CD formations. It is a training ground, two

classrooms, and protective structures. In each shop places for lessons have been determined and civil defense corners have been set up. There are sufficient gas masks, respirators, radiation and chemical reconnaissance instruments, and other training equipment.

The plant trade union committee concludes an agreement with the rayon film distribution department and they give us films on CD subject matter which we show in the plant house of culture and prior to the beginning of the showing of artistic films.

Training is proceeding well in the repair-machine shop (chief I. Danilyuk). On the base of the shop, an emergency-technical group has been formed where the commander is Ye. Matviyuk. Lessons take place in the Lenin room and on the training ground. A model CD corner has been set up in the shop and there are posters, literature, film strips, and a film viewer. Along with production obligations, the workers assumed socialist obligations in civil defense. One of the sections of the civil defense corner is devoted to the leaders in the competition--civil defense activists fitter and Hero of Socialist Labor V. Saranenko, fitters V. Bandarchuk, A. Koshevoy, and P. Padun, and others.

Competitions of formations are an important stimulus for the consolidation and improvement of skills. The plant's reconnaissance group has won first place in rayon competitions for several years in a row and third place in the oblast competitions. This is to the credit of its commander, engineer A. Granevich. The volunteer aid detachment under the command of a worker of the energy shop, A. Pustovitko, has also won prize-winning places many times. On soirees, "Now then, fellows," we mandatorily include civil defense questions.

The party bureau devotes much attention to the improvement of civil defense at the plant, regularly hearing information reports from the staff on the course of the training.

According to the results of the last training year, our installation is considered the best in the rayon and in the branch. The director and CD chief, I. Bandur, has been awarded the badge "Expert of Civil Defense of the USSR."

True, we have not yet succeeded in achieving such a return from the lessons everywhere as in the repair-machine shop. A certain lagging has been noted in the sorting and packing shops (chiefs V. Salatskiy and I. Kucheruk). Therefore, as chief of staff I consider it my duty to intensify the monitoring of the training process in these subunits and to render greater assistance to the lesson leaders.

A. Makukhovskiy, CD chief of staff,
Pervomayskiy plant of "Ukrelektroizolator"
[Ukrainian Electric Insulator]
association, Zhitomirskaya Oblast.

First for the Third Time

Competitions of voluntary fire-fighting detachments--important civil defense formations created in the kolkhozes and sovkhoses--are conducted annually in Taranovskiy Rayon. This year, they took place in three basic types: crossing a 100-meter strip, fire relay race, and combat deployment of fire engines.

The detachment of the "Kolos" sovkhos (commander V. Lutsik) won first place for the third time already. Good time was shown by fighters A. Khripunov and S. Gudkovskiy. The detachment of the Nikolayevskiy sovkhos demonstrated coordination, ability, and dexterity in deploying the machines. It was awarded second team place. The third-prize position was won by the team from the Taranovskiy poultry sovkhos.

In analyzing the results, the inspectorate for fire supervision and the civil defense staff noted ways for the more massive attraction of these formations to competition in the forthcoming training year.

Thus, the competitions will become not only an important form for consolidating knowledge and improving skills, but will also contribute to raising the readiness of the fire-fighting detachments for the accomplishment of missions in a difficult situation.

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CIVIL DEFENSE

TRAINING AND RELATED ACTIVITIES: TACTICAL-SPECIAL EXERCISES FOR MEDICAL AID PERSONNEL

Moscow VOYENNNYYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) p 20

[Article by Col Med Serv M. Gogolev: "Voluntary Aid Detachment On An Exercise"]

[Text] In accordance with the program, special tactical exercises (TSU), whose goal is instilling in the personnel firm skills and teaching commanders to control their teams and maneuver them depending on the situation which has developed, are conducted with the voluntary aid detachments. It is not enough to be able to apply bandages and splints and employ other first aid measures. It is very important, especially for the commander, also to acquire organizational skills for working in stricken areas and in areas of natural disasters.

Special tactical exercises are conducted annually as the concluding stage of training. Their subject is determined with consideration of the program's recommendations and local conditions. Thus, if the medical aid detachment has just been created or its personnel consist of more than half newcomers, it is expedient to devote the exercise to the actions of the formation in a nuclear stricken area. The next year, this subject is no longer repeated and they move on to the next one.

The specific nature of the installations should also be considered. At enterprises which have aggressive poisonous substances, it is expedient to begin with working out actions in a chemically stricken area. With voluntary aid detachments which have been attached to first aid detachments (OPM) and to mobile epidemic prevention detachments (PPEO) special tactical exercises are conducted as part of these formations. TSU's provide a special effect in the course of combined installation exercises.

A plan is worked out for the special tactical exercise. It indicates the subject, goals, time and place of conduct, training problems and the time allotted to them, and material support. Organizational and methodological instructions reflect the order for the preparation and conduct of the exercise.

The goals may be most diverse. For example, to work out problems in the notification, assembly, and bringing of the formations to readiness, to acquire experience in joint actions with rescue, fire-fighting, and other formations, and so forth.

Each special tactical exercise begins with bringing the voluntary aid detachment to readiness and with checking its equipment. This is also done in the case where

these questions were well worked out earlier and the personnel consist of almost no newcomers; only less time is allotted to them.

Those leaders who keep the exercise plan a secret are committing an error. There is no necessity for such secrecy. On the contrary, it is necessary to assist each participant in the exercise to master his tasks and duties clearly. The commander should define in detail ahead of time the scheme for notifying the formation during work time and non-working time, the procedure for protecting the personnel, and should check and replenish equipment. A reconnaissance of the stricken area where the detachment will work should be conducted with the commander and political instructor. Special attention should be paid to their personal training. It is expedient to work out some of the commander's instructions with him and with the political instructor.

Such thorough preparation will permit the leader to bring the situation to the attention of the commander without spending much time in the course of the exercise and to assign tasks to subordinates. And really, the commander and political instructors themselves, being well informed, will be able to direct the teams more purposefully and to step forth not only in the role of trainees, but also as assistants to the exercise director.

It happens that on one exercise the voluntary aid detachments strive to work out actions in several stricken areas at once. There is little sense in such superficial study. Nor is it recommended that the work of a voluntary aid detachment as part of an OPM or PPEO be taken as a subject if exercises are not conducted with these formations. At the same time, practice has shown the great effectiveness of the special tactical exercises of voluntary aid detachments jointly with engineer, fire-fighting, and other formations.

Now, several remarks about the procedure of the exercise itself. Usually, in assigning the task to voluntary aid detachments a brief report is given on the situation on the presumed work sector, the number of casualties and the procedure for their evacuation, and the place for loading onto transportation. The personnel are also informed about established signals and places for taking cover in case of enemy attack. And only after each medical team, political instructor, and messenger understands his task is the commitment of the voluntary aid detachment to the work sector organized.

If the formation is to operate under conditions of radioactive contamination of the terrain, it is necessary to see that all detachment members take the radioactive protective means from the first aid kit (arbitrarily 30 minutes prior to the start of work). The same thing also prior to entry into a chemically stricken area where the antidote against organophosphorous agents serves as a protective drug. The disregarding of these requirements should be considered as such a very coarse error as the inability to use equipment for protecting the respiratory organs: the respirator--in a nuclear stricken area, and the gas mask--in a chemical stricken area.

The effectiveness of the exercise greatly depends on the simulation and even on how successfully the "casualties" have been grouped and accommodated. The situation in the stricken area should permit the detachment members to work out the search for casualties, their sorting, rendering first aid, and loading on transportation. For

this, it is expedient to have one autobus equipped for the shipment of casualties (side-loading cargo vehicle) at an installation where there are many voluntary aid detachments (or for several installations).

The voluntary aid detachments are assigned the direction of the stretcher teams which ensure the evacuation and loading of the casualties. Therefore, they also should know the transportation procedures. Unfortunately, on exercises the loading of "victims" is often conducted without consideration of the nature of the injuries or the sequence of evacuation. In order to prevent this, it is necessary to have well-prepared cards with the symptoms of the injuries and to teach the detachment members the procedures of medical sorting.

On the special tactical exercise casualties of serious and medium gravity and light casualties should be in each group. The members of the voluntary aid detachments are first required to determine from the cards who should receive aid first and then the sequence for accomplishing the procedures. For example, if a "victim" has an open fracture of the thigh with arterial bleeding, first the bleeding which is a threat to life is stopped, a pain-killer is administered, and a sterile bandage and then a splint are applied.

Unfortunately, not always do the conditions of the exercise force the commander to maneuver the medical teams, consider the nature of the radiation situation, and employ field expedients when rendering assistance. All this lowers the effectiveness of the training significantly and simplifies the work of the detachment members.

At times, especially great conventionalities are permitted when working out actions in an area stricken with an especially dangerous infection. Thus, whether the detachment members are able to don individual protective equipment including an anti-plague outfit and use it, how correctly they take samples of water, soil, vegetation, and food, and whether they observe the sequence of operations when making the rounds apartment by apartment is not always strictly followed. Meanwhile, in this stricken area all measures, including emergency prophylaxis, disinfection of premises, work in the medical check point, and emergence from the stricken area require the most thorough and scrupulous accomplishment. The taking of samples, preparation of decontamination solutions, and disinfection procedures can be worked out by teams with the successive changing of teams at the training sites. The voluntary aid detachment studies work in the medical check point and with the disinfection chamber as a complete unit.

Results are summed up after the special tactical exercise. A well-prepared critique is the same training. The experienced leader does not lose the possibility to show graphically which errors have been committed and how to avoid them in the future. Practice shows that the most frequent errors are committed when conducting the sorting and transportation of casualties. Special attention should be directed to these questions during the critique.

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CIVIL DEFENSE

TRAINING AND RELATED ACTIVITIES: COURSE ON PERSONAL PROTECTION MEANS

Moscow VOYENNYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) pp 22-23

[Article by G. Mizikovskiy, methodologist, Moscow City Advanced Training Institute for Teachers: "Both Drills and a Method for the Standards"; third subject]

[Text] The subject "Personal Protective Means" is one of the core subjects in the process of molding the necessary civil defense abilities and skills in the students. It is namely this which determines the procedure for its study. It is not by chance that it is recommended that all four lessons be conducted as practical lessons.

The effectiveness of any lesson is determined by the validity of the selection not only of its structure and instructional methods, but also of its aims. Unfortunately, practice shows that already at the preparation stage inexperienced military instructors commit errors here. Correctly determining the instructional goals of the lesson, they do not always assign educational tasks, which is especially impermissible when studying this subject.

This is all the more necessary since at times the notion exists among the students that that almost all who landed in a stricken area will find themselves at ground zero of a nuclear burst. Meanwhile, calculations show: with the skillful use of the means for collective and personal protection on considerable territory of a nuclear stricken area people will remain alive and even will not lose fitness for work. And if we speak of the gas mask, it will serve as reliable protection in a chemically stricken area and during accidents with the scattering of aggressive toxic substances.

Therefore, in studying this subject the military instructor sets the educational goal--to instill in the students a confidence in the effectiveness of personal protective means and to cultivate in them such qualities as attention, endurance, purposefulness, and a readiness to aid a comrade.

As experience shows, there are no difficulties in selecting training material. In addition to the textbook on primary military training, we can recommend the texts: "Grazhdanskaya oborona" [Civil Defense], A. T. Altunin, general editor, Moscow, Voenizdat, 1980, pp 51-80. "Uchebno-metodicheskoye posobiye po nachal'noy voyennoy podgotovke" [Training-Methods Aid for Primary Military Training], Moscow, Prosveshcheniye Press, 1981, Chapter 8. Of graphic aids--tables on civil defense, grade 9, Moscow, Prosveshcheniye Press, 1979.

The main instructional goal of lessons on the third subject is to mold and consolidate in the students skills in the use of personal protective means and the making of very simple means to protect the respiratory organs. All four one-hour lessons should be devoted namely to this. Their procedure is also determined accordingly.

It can often be observed how much time is improperly spent on the explanation of theoretical questions: the construction of gas masks, the respirator, special protective clothing, and so forth. In the pursuit of fashion some military instructors are excessively attracted by the showing of film strips and motion pictures. All this takes away from the main thing--from practical work with personal protective means. As a result, far from all school graduates are able to don the gas mask correctly and quickly and, in case of necessity, to be in them for a prolonged period of time. This is the direct result of the incorrect determination of the main thing in the subject and the groundless selection of the lesson's structure and methods of instruction.

Here is a typical error of the inexperienced military instructor--in beginning the explanation, he "forgets" that there is not so much time for the study of new material. In fact, about 5 minutes are spent on summing up results and commenting on the home assignment and at least 10 minutes--on checking the assimilation of material which was covered previously. Of 45 minutes, about 25 remain for new material. Therefore, in no case can we drag out the stages for organizing the lesson or check; otherwise, the time for the practical working out of procedures in the use of personal protective means will be reduced.

From the structure of the lesson, let us move on to methods for studying the subject. The main thing here is to ensure the intensive work of each schoolboy. This is attained by the exemplary showing of procedures and then their repetition by the schoolboys, that is, by drilling.

Some military instructors demonstrate the exemplary performance of one or another procedure and then work it out with the entire class. Others proceed somewhat differently. On their command squad leaders (instructors) demonstrate how the gas mask, respirator, and means for protecting the skin should be correctly donned and worn. And then drills take place in the squads under the direction of these same instructors.

Of course, the second way is connected with certain difficulties and requires great teaching skill and additional time for the training of the squad leaders (instructors). But, as school practice convinces us, here the intensity of the training process is increased and the possibility appears to organize competition between squads and, as a result, deeper and firmer knowledge and skills are ensured.

Experience shows that under these conditions the teacher has the opportunity also to accomplish more successfully those tasks which were discussed above--indoctrinating the students in a spirit of comradeship and mutual assistance and strengthening in them the readiness to come to one's aid at a difficult minute.

Several words about checking knowledge, abilities, and skills. In accordance with the program, each schoolboy should receive a grade for the accomplishment of standards Nos 1 and 4 (putting on the gas mask and respirator), No 2--putting the gas

mask on a "casualty," and No 5, making and applying a cotton gauze bandage. However, testing for the standards can proceed in the course of instruction not only in the given subject, but also in the entire civil defense course. The experience of the best military instructors convinces us that it is expedient so to organize the matter that each pupil has the opportunity to raise the grade which he received for accomplishing one or another standard. In this regard, he should be confident that the preceding grades will not be considered--the final result is important.

Let us now dwell on a question such as the inter-subject ties when studying the subject "Personal protection means." In accordance with the exemplary sequence for the covering of the sections and subjects of the program (see Appendix No 1), the third subject is studied in the 9th grade at the 17th week. At approximately this time the subject "Carbon subgroup" (questions "Carbon. Chemical properties of carbon. Assorption") is studied on chemistry lessons. It is tied in directly with the construction of the gas mask. This is why it is expedient for the military instructor to maintain contacts with the chemistry teacher. Usually, the subject teachers willingly go half way, but the military instructor himself should not lose the opportunity to stress the connection of the two subjects.

The special features of the procedure which are typical for all four lessons were examined here. Now let us touch on each of them.

Filtering gas masks, their purpose, construction, and rules for use are studied on the first lesson. As a result, the schoolboys should learn to fit the helmet face-piece, check its working order, gather up and stow the gas mask in the carrying case, and use it. Therefore, all trainees must be supplied with gas masks and accessories to determine the size of the gas mask.

The military instructor tells about the purpose and construction of the gas mask briefly, as a reminder. The main thing is the practical working out of procedures. For this, it is desirable to set up as many training sites as squads which have been created in the class. Some military instructors help the squad leaders (instructors) ahead of time to prepare small lesson plans which set forth the order for working out the practical problems, tables to determine the height of the gas mask, and standards.

What is the role of the military instructor during the lesson? First, the working out of one or another procedure or standard begins on his command. Second, he monitors the entire course of the lesson. And if he sees that some squad is committing serious errors (they do not close the eyes, do not hold their breath, do not exhale sharply having donned the gas mask), he should assume command and repeat the working out of the standard by the numbers. The military instructor should be just as attentive and demanding when working out procedures for the use of a defective gas mask.

Practice shows that the precise and clear accomplishment of the procedures cannot be attained on the first lesson. This is why there should be a periodic return to this question subsequently.

The R-2 respirator, very simple means for protecting the respiratory organs, and medical personal protection means are studied on the second lesson. Approximately 10 minutes are allotted to checking the material which has been covered. The military instructor may give the squad leaders the order to begin to work out standard

No 1 (donning the gas mask) and No 2 (putting the gas mask on a "casualty"), and himself may check how the gas mask is used at one squad. As a rule, he succeeds in checking two squads in the allotted time.

The procedure for studying the new material is approximately the same as on the first lesson, that is, the military instructor relies on the squad leaders (instructors). Considering the simplicity of making a cotton gauze bandage, experienced military instructors succeed in taking up standard No 5. For this, telling briefly about very simple means for protecting the respiratory organs and showing how to make and use the cloth dust mask (PTM-1), the military instructor gives the assignment to the squad leaders (instructors) to make and put on a cotton gauze bandage. Then he acquaints the schoolboys with the conditions for accomplishing the standard: those taking the test are located at tables on which the material for bandages is laid out. The command "Make and put on cotton gauze bandage" serves as the signal to start work.

The procedure for using the first aid kit and individual anti-chemical packet is worked out approximately as follows. The military instructor presents the new material and explains and demonstrates the necessary practical procedures, and then he tells the students to repeat them.

The subject of the third lesson is very simple means to protect the skin and special protective clothing. The squad leaders (instructors) come to the lesson in sports clothes and bring along hoods, jackets, rubberized raincoats, rubber boots, in short, what increases the protective properties of regular clothing. First they undergo a briefing under the direction of the military instructor, and on the lesson they demonstrate to the remaining students the procedures for using improvised means to protect the skin.

I should like to caution against one rather widespread error which is committed when studying special protective clothing. Often they tell about this clothing in too much detail and are carried away by showing film strips so that no time remains for the practical working out of procedures. But you see, the main thing is the acquisition of abilities and skills.

The fourth lesson is devoted to drill and the accomplishment of standards Nos 1, 2, 4, and 5 and working out the procedures for putting on the combined-arms protective kit. The training sites correspond to the number of squads. It is desirable to provide all squad leaders with stopwatches since they also will take up the standards. It is only important that on preliminary lessons they master well and write down the procedure for the accomplishment of the standards which is presented in the appendix to the program for the general mandatory minimum of the population's knowledge on protection against weapons of mass destruction.

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CIVIL DEFENSE

TRAINING AND RELATED ACTIVITIES: PERSONAL MEDICAL SUPPLIES DESCRIBED

Moscow VOYENNNYYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) pp 22-23

[Article: "Personal First-Aid Kit"]

[Text] The personal first-aid kit serves to render self-help or mutual assistance to prevent or reduce the harmful effect of the damage-causing factors of nuclear, chemical, and bacteriological weapons on the human organism. The means contained in it are in the corresponding recesses and enclosed in small containers of various colors and shapes, which facilitates finding the necessary preparation.

Just what are these means?

Pain killer (1)--syringe tube with colorless cap--used with heavy pains caused by fractures, extensive wounds, crushing of tissues, and burns.

Agent with poisoning with organophosphorous toxic substances (2)--red container. Used by taking one tablet when the warning signal "Chemical Alert" arrives. If the signs of poisoning increase (disruption of vision, difficulty in breathing, hypersalivation), one more tablet should be taken.

Antibacterial agent No 2 (3)--large container without coloring. Employed after irradiation with the emergence of gastro-intestinal disorders by taking seven tablets on the first day and four each on the two following days.

Antiradiation agent No 1 (4)--two containers rose in color. The contents of one container (six tablets) are taken with the threat of irradiation. If irradiation continues six more tablets should be taken after four to five hours.

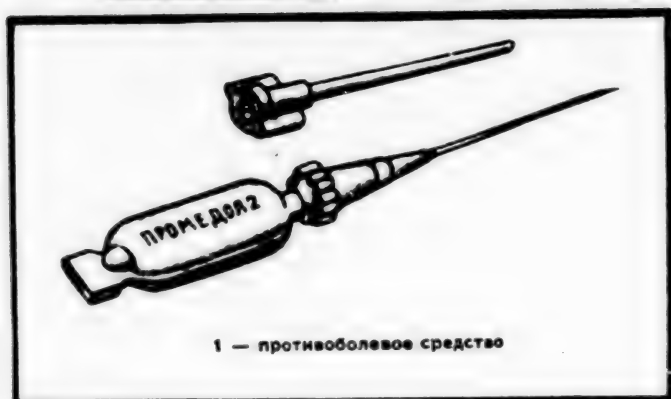
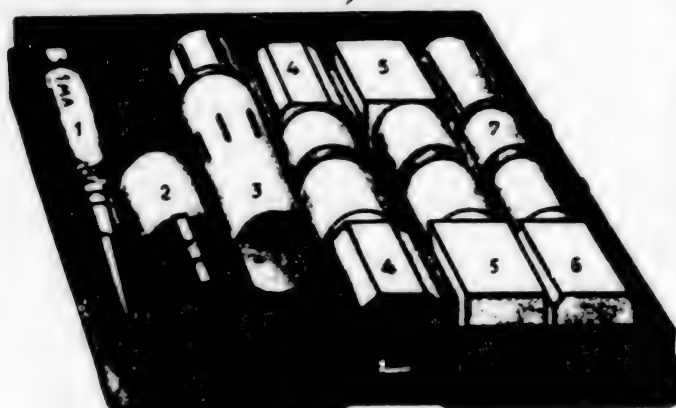
Antibacterial agent No 1 (5)--two containers without coloring. Taken with the suspicion of infectious disease as well as with wounds and burns. The contents of the container are taken at one time (five tablets). Take again after six hours.

Antiradiation agent No 2 (6)--white container. One tablet is taken daily for 10 days after the fallout of radioactive precipitation, with the use of fresh milk in food.

Antivomiting agent (7)--light blue container. One tablet is taken immediately after irradiation or contusion when nausea appears. If the nausea does not pass, one more tablet of the preparation should be taken in three to four hours.

It should be remembered that children up to 8 years of age are given one fourth, and from 8 to 15 years--half the adult dose. True, this does not pertain to the pain killer and antiradiation agent No 2. A full dose of them is given.

The first aid kit is easily placed in the pocket of clothing and it is expedient to take it along, especially in winter, so that the fluid in the syringe tube does not freeze. The storage period of the package is five years and of the preparations contained in it--three years.



[Key on following page]



Key:

1. Pain killer; Promedole 2
2. Poisoning agent with organophosphorous toxic substances; Tarene 6 tablets
3. Antibacterial agent No 2; Sulfadimethoxine 0.2 15 tablets
4. Antiradiation agent No 1; Cystamin 0.2 5 tablets
5. Antibacterial agent No 1; Chlorotetracycline 100,000 units 5 tablets
6. Antiradiation agent No 2; Potassium iodide 0.25 10 tablets
7. Antivomiting agent; Perphenazine 0.006 5 tablets

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CIVIL DEFENSE

TRAINING AND RELATED ACTIVITIES: USE OF COMPUTER IN CIVIL DEFENSE DESCRIBED

Moscow VOYENNNYYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) pp 24-25

[Article by V. Frolov, candidate of technical sciences: "On Familiar Terms with the Computer"]

[Text] The article by A. Bryukhanov, "Using 'Pocket' Computers," (VOYENNNYYE ZNANIYA No 5, 1981) raised an extremely burning question. Actually, computer equipment should be involved more boldly and widely in the accomplishment of civil defense [CD] tasks. Unquestionably, the use of keyboard computers is a promising trend. However, there are problems which are beyond the capabilities of microcalculators. They arise especially frequently when planning CD measures at the scale of an installation of the national economy and when estimating the stability of its functioning under special conditions. In this case, it is expedient to use a stationary computer which is usually employed for planning calculations at the installation itself.

At installations such as higher educational institutions [vuz], especially those with a technical category, their own computer center or complex may be organized, and already in the first course the students master the principles of computer programming there. All this permits using internal reserves with great effectiveness for the solution of civil defense problems directly at the installation of the national economy itself.

At the same time, it should not be thought that the contemporary high-speed computer automatically removes all problems, that it is only necessary to press the "Start" button on the console. It is known that the computer will accomplish faultlessly even meaningless instructions. The experience of specialists tells us that even an incorrect answer which is given with an accuracy out to 16 decimal places can appear convincing. Felt here is some psychological effect which at times accompanies the mastery of electronic equipment. In addition, the CD specialist should know in which cases he should not load the computer in vain, wasting precious machine time. When the system for the formalization of initial data is not sufficiently rational, the use of the computer may prove to be ineffective altogether. In such cases, it is better to become equipped with a microcalculator or to make a trial calculation using tables and nomograms. Consequently, one who is working with a computer should have a good understanding of problems in computer software.

In the accomplishment of CD tasks, most often it is necessary to encounter the necessity for a scientific analysis of planned measures which are called operations in cybernetics. For example, as a result of an enemy nuclear strike or a natural disaster production is disrupted at an installation of the national economy. Its leader has a limited quantity of forces and equipment at his disposal. How should the machines and people be distributed more efficiently by sectors in order to complete rescue and emergency salvage and restoration work in the shortest time?

For this, it is necessary to change from a verbal description of the situation which has developed at the installation to a mathematical model. Usually, it has the form of a system of equations with known coefficients given in the form of numbers $a_1, a_2 \dots a_n$ and unknown variables-- $x_1, x_2 \dots x_n$ which require calculation with certain restrictions ($a_1 > c_1, a_2 > c_2 \dots a_n > c_n$).

This is the most important and crucial part of a study which requires a profound knowledge not so much of mathematics as of the essence of the phenomena being modeled. As a rule, "pure" mathematicians cope with this task poorly without the assistance of CD specialists. Experience shows that the most successful models are created by specialists who have received the corresponding mathematical training in addition to their basic training or else by computation groups which combine both specialists and mathematicians.

The structuring of an operation's mathematical model is not important by itself. It should disclose the optimum solution--let us say, the most expedient distribution of available personnel and equipment under given conditions. In order to compare different solutions with one another for effectiveness, it is necessary to have available a certain quantitative criterion, that is, an effectiveness index. This index is selected in such a way that it best reflects the purpose of the operation. Very often, expenditures on the accomplishment of the operation which, naturally, should be reduced to a minimum, play the part of such an index. For example, an operation is undertaken to increase the stable functioning of an installation. For this, it is necessary so to change (simplify) the production technology as to reduce the cost price of the output as far as possible. Then, it will be natural to take as the effectiveness index the mean cost price and to prefer the solution which will reduce this index to the minimum.

The incorrect selection of the effectiveness index is very dangerous since it leads to incorrect recommendations and, consequently, to unjustified expenditures and losses. In practice, the effectiveness index is often formulated in the form of a fraction where the numerator contains those values whose increase is desirable while the denominator contains those whose increase is undesirable. For example, the length of a demolished obstruction--in the numerator, labor expenditures and the cost of consumed motor capacity--in the denominator. The compilation of such an index should be approached very cautiously, and here is why. It is based on an implicit assumption that a shortcoming in one parameter can always be compensated at the expense of another: for example, low efficiency--through low cost.

But now the mathematical model of the operation being planned has been compiled and its effectiveness index has been selected. Before us is a typically mathematical problem. The solution methods have been worked out in detail in mathematics and are known to every student. They are prescribed to find the maximum or minimum

Key:

- First, in real life it is necessary to consider many arguments, and the solution of a system of equations often proves to be more complex than the direct search for the extremum rather than simpler. Second, the extremum is frequently attained not at all at the point where the derivatives vanish (such a point may not exist at all), but somewhere on the boundary of the arguments' region of change. Furthermore, it should not be forgotten that the effectiveness index may not have derivatives, either, for example, be an integer function, or it may be given by the higher CD headquarters only with integer values of the arguments. And absolutely new mathematical procedures come to our assistance right here. One of them--the method of linear programming--was worked out in our country not long before the Great Patriotic War. A typical type of problems which it solves consists of problems of sets and mixtures. Their formulation using such a procedure is extremely effective in military affairs.

This method is also widely employed when solving typical civil defense problems: the optimum distribution of personnel and equipment when conducting SNAVR [rescue and emergency reconstruction work], determining the optimum composition of an installation's personnel in wartime, and so forth.

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two rescue groups, two voluntary aid detachments, an emergency technical and mechanization group, and three squads of a fire-fighting team with two pumps and one bulldozer. With these forces and equipment it is necessary to localize fires in building "A" and part of building "B", damage to the water-supply system (between buildings "A" and "B"), eliminate a chemical stricken area which arose due to the destruction of a tank with chlorine, which is used in a technological process, by the shock wave, make passages in the obstructions, and uncover buried structures. Naturally, it is required to accomplish this in the shortest time, that is, we have here a typical problem in the optimum distribution of personnel and equipment. A linear programming apparatus can be used for its solution on a computer. First of all, it is necessary to change from a verbal description of the situation to its mathematical model. Let us designate the resources which are at the commander's disposal: $a_1, a_2 \dots a_n$, where a_1 is a rescue team, a_2 the bulldozer, and so forth. Each resource can be used for one or several types of work which constitutes SNAVR, in which regard, with the corresponding productivity. Thus, for example, when committing resource a_1 the commander knows that this guarantees him the demolishing of an obstruction up to one meter high in three hours, and committing resource a_2 he can clear a passage 100 meters long in the obstruction in one hour. These data are input into the computer memory. Now, let us investigate the complex of impending SNAVR by the work elements: the clearing away of obstructions at building "A" (b_1), the clearing away of obstructions at building "B" (b_2), the localization of fires (b_3), uncovering buried shelter No 10 (b_4), and so forth.

If, for simplicity, we do not consider the coefficients which are necessary to observe the dimensionality of the values being input, it can be said that the quotient from the division b_i/a_j provides the time for the accomplishment of specific elementary work t_i . The smaller it is, the less also the total time for the accomplishment of SNAVR. Gaming various combinations in the total sum $\sum b_i/a_j = t$, we can find those which guarantee the optimum solution.

In other words, the computer gives the commander the answer on how best to distribute the personnel and equipment which are at his disposal among the work sectors. True, here we proceeded from the fact that all elementary work is of equal importance. However, this does not always happen in practice: some work which is part of the SNAVR complex has a certain priority.

It should also be considered that SNAVR must be conducted on radioactively contaminated terrain, i. e., the commander must establish the permissible radiation dose (let us say, 20 R) ahead of time for the personnel of the formation. This condition must also be input in the computer. Now, the optimum distribution of personnel and equipment which has been calculated on the computer may differ from that found earlier. Furthermore, it may be necessary to work in two or three shifts. The solution computed on the computer can be considered best and optimum only with consideration of such additional conditions (their input into the computer is the commander's prerogative). This shows once again that no computer replaces man and does not relieve him of the necessity to think and solve assigned problems creatively.

Is the contemporary engineer--it is he who is commander of the installation CD formation--ready to use the computer for the optimum calculation of personnel and equipment, evaluation of the installation's stability, and so forth? Unfortunately, there is no unambiguous answer to this question. In technical higher educational

institutions the program for the CD course does not envisage the study of the means and methods of contemporary computer equipment in the interests of civil defense. Meanwhile, the necessity for this has long been urgent. The paradox is that a most modern high-speed computer (and even a most modern computer center itself) is now found in each higher educational institution, at times adjacent to the CD department. However, in the process of training the young commander of a non-militarized formation the computer frequently remains "a thing in itself." Of course, it happens that the programming of CD tasks on a computer (as, by the way, CD problems themselves) is included in course or diploma planning. But this namely "happens" because it is determined most often by the personal contacts and mutual relations between the chief of the CD department and the heads of the specializing departments and deans. True, the corresponding letter of instruction of the Ministry of Higher and Secondary Special Education of the RSFSR exists concerning the desirability of including CD problems in course and diploma planning. Today this is not enough. Evidently, the USSR Ministry of Higher and Secondary Special Education should work out a document which requires rectors to include a certain percentage (for a start, let us say three percent) of the subjects accomplished by the students in the interests of CD (perhaps, also in the interests of the CD staff of the same higher educational institution) including, of course, with the use of the computer. The genuine necessity to have in city and other CD courses specialists who are able to employ contemporary computer equipment when solving specific civil defense problems at an installation of the national economy has also become urgent.

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PERCEPTIONS. VIEWS, COMMENTS

WESTERN SHIP-SHIP MISSILES DISCUSSED

Moscow VOYENNNYYE ZNANIYA in Russian No 1, Jan 82 (signed to press 8 Dec 81) p 42

[Article by Capt-Lt M. Kozhevnikov: "Missile Against the Surface Ship"; from data in the foreign press]

[Text] If foreign specialists do not doubt the necessity to arm ships with surface-to-air missiles (ZURO), there was no single opinion concerning the creation of ship-ship guided missiles (UR).

The sinking of the Israeli destroyer "Eilat" in 1967 by cruise missiles launched from an Egyptian guided-missile boat sharply changed the attitude of the NATO naval specialists toward equipping ships with weapons for firing at surface ships. Since then, the intensive development of antiship guided missiles has begun in the United States, Great Britain, France, Italy, Norway, and Israel.

As statistics show, the mean percentage of hits on big surface ships in World War II was: for guns--about 4 percent, for torpedoes--about 15 percent, and aerial bombs--about 7 percent. According to foreign experimental data for UR's the mean hit percentage on big surface ships reaches 50 percent or more. Such a high hit probability is ensured by the system for guiding the missiles to the target in flight.

In the West the following types of ship-ship UR's are in the inventory: "Harpoon" and "Tomahawk" (United States), "Exocet," MM38, and MM40 (France), "Otomat" MK1 and MK2 (joint Franco-Italian production), Sea Killer MK 2 (Italy), "Gabriel" MK1 and MK2 (Israel), and "Penguin" (Norway).

In the majority of cases these UR's have an active and passive target detection system which operates on the last section of flight, while the guidance system guarantees flight at an insignificant altitude above the surface of the water. Control for altitude is provided by a radio altimeter in accordance with an assigned program. As a rule, these missiles have a solid-fuel engine except for the long-range missiles "Harpoon" and "Otomat" which have liquid-fuel engines.

The URO [guided missile weapon] cruisers of the "Leahy" class, "Spruance"-class destroyers, URO frigates of the "Oliver H. Perry" class, frigates of the "Knox" class, guided missile boats of the "Pegasus" class, nuclear torpedo submarines of the "Los Angeles," "Sturgeon," and "Permit" classes, and the shore-based P-3C "Orion" patrol airplane, the carrier-based antisubmarine warfare [ASW] "Viking" airplane, and the

"Intruder" and "Corsair-2" fighter bombers are armed with the American "Harpoon" UR. The missile may be launched from various launching rails, for example, for the PLURO [antisubmarine rocket] "Asroc" and the ZURO "Tartar." Guidance on the initial section of the trajectory is accomplished using an inertial system, and on its final section--an active homing system. For a large part of the distance the rocket flies at an insignificant altitude, and on the final section--almost at the water itself or else it attacks the target from a zoom into a dive. The "Harpoon" UR is being purchased for the navies of Great Britain, the FRG, the Netherlands, Denmark, Saudi Arabia, Turkey, and Israel.

The inventory of the Italian Navy includes the "Mariner" guided missile system. It consists of an acquisition and guidance radar, computer, optical tracking system, radio-command control system, and launchers with the "Sea Killer" MK2 missiles. A primary radio-command and back-up optical method for guidance to the target are used in the "Mariner" system. In both methods, the missile is guided to the target by the operator. The second guidance method is more stable against the effects of electronic countermeasures (REP), but it depends on visibility conditions. After launch, the missile zooms up to 120 meters and then drops to an altitude of 12-15 meters and is guided to the target. On the final section of flight, three to four kilometers from the target the missile drops to one of three fixed altitudes (three, four, or five meters), the selection of which depends on the condition of the sea and the dimensions of the target, and it hits the target at this altitude. The rocket warhead has a contact and a radio fuze.

One of the best anti-ship UR's is considered to be the French missile of the "Exocet" MM38 and MM40 "ship-ship" class, and its AM39 modification is used from aviation carriers. This complex consists of a shipborne acquisition and target indication radar, missiles in airtight containers with the launch rails, and fire control instruments. Control of the missile on the initial section of the trajectory is provided by an inertial guidance system, and on the final section--by an active homing system. After launch, the missile zooms to an altitude of up to 30 meters, then drops to an altitude of 10-15 meters, and flies to the target. After locking on the target by the homing system the missile drops to two to three meters above the surface of the water and attacks at this altitude. The "Exocet" UR is in the armament of the helicopter cruiser "Jeanne d'Arc," the cruiser "Colbert," destroyers (EM) and URO frigates, guided missile boats of the French Navy, and escort ships and guided missile boats of other countries.

The Norwegian anti-ship UR "Penguin" was the first which they began to develop in the West even before the sinking of the EM "Eilat." The missile complex consists of an acquisition and target indication radar, target-tracking optical device, and airtight container with the launching rails. Control of the missile in flight on the initial section of the trajectory is accomplished by an inertial system, and on the final section--by a heat-seeking head. The "Penguin" UR is in the armament of guided missile boats of the "Storm," "Snögg," and "Hauk" classes of the Norwegian Navy.

The Israeli anti-ship UR "Gabriel" was used successfully in the 1973 Arab-Israeli War. Now the UR's "Gabriel" MK1 and MK2 are in the armament of guided missile boats of the Israeli Navy. The missile complex consists of an acquisition and guidance radar, radio-command control system, and single-container launchers. The missile

is guided from the firing ship until the moment that it hits the target. The flight trajectory on the final section of the trajectory has an altitude of several meters above the surface of the water. The UR "Gabriel" is being delivered to the United Arab Republic, Thailand, Chile, and Taiwan.

The second generation of "ship-ship"-class UR's includes the "Otomat" which is being jointly produced by the French and Italians. This missile is also used in the aviation variant. According to preliminary estimates of foreign military specialists, the UR "Otomat" is more improved than the missiles "Exocet" and "Sea Killer" MK2. After launching, the UR "Otomat" zooms to an altitude of 150 meters, then drops to an altitude of 15 meters and flies at this level until reliable target lock-on by the homing system (at approximately seven kilometers from the target); after this it zooms up and dives on the target. The missile's homing head is of the active type. The "Otomat" UR is in the armament of guided missile boats of the "Sperviero" class and other ships. The "Otomat" missile is being supplied to Nigeria, Venezuela, and other countries.

According to reports in the foreign press, the most active work on the improvement and development of new anti-ship UR's is being conducted in the United States. On the base of the "Tomahawk" cruise missile the development of a new air-based cruise missile has begun. It will be created in variants: for naval aviation and for the Air Force. The difference in these variants will be only in the conditions for placing the missiles on the carriers. The basic characteristics of the missile: launch weight--900 kilograms, weight of explosive--350 kilograms, weight of fuel--105 kilograms. Flight range is about 500 kilometers and maximum speed is about 270 meters per second. Length is 4.88 meters. Wing span is 2.29 meters. Diameter of the body is 0.52 meters.

In drawing conclusions from the employment of anti-ship UR's, the foreign press stresses that there can be no complete reliance on the "Exocet," "Otomat," and "Harpoon" UR's with active homing heads because being autonomous from the moment of launching they are subjected to the influence of REP means and, because of this, can lose their direction. Such UR's as the "Sea Killer" and "Gabriel" are considered more stable against the effects of REP means. However, these complexes are subjected to the effects of air defense weapons of the ships being attacked for a longer period. In this connection, it is stressed that an important problem is the protection of the UR's against the enemy's REP means.

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